PRODUCTION
FOR USE

PRODUCTION FOR USE

HAROLD LOEB

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Does poverty reside in the nature of things? Is it a natural, inevitable evil? Many of us didn't think so. But we had no proof.

Today we know. We have the facts—scientific proof that poverty in this country is due to our failure to make the most of our knowledge and productive equipment.

To get at these facts, Harold Loeb persuaded official Washington to set up a project, the National Survey of Potential Product Capacity, to gather definite and accurate information concerning the capacity of American Industry to satisfy the needs and reasonable wants of the total population. What did the Survey disclose?

In PRODUCTION FOR USE Harold Loeb, who headed the Survey, tells the dramatic story. Why abundance for everyone is possible and achievable; how this country is equipped to provide everyone with a high standard of living; how poverty is artificially enforced by our institutions which have not kept pace with technological progress. Leaders of public opinion in all parts of the country have hailed the Survey as a landmark in the economic thinking of America.

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USE

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PRODUCTION FOR USE

HAROLD LOEB

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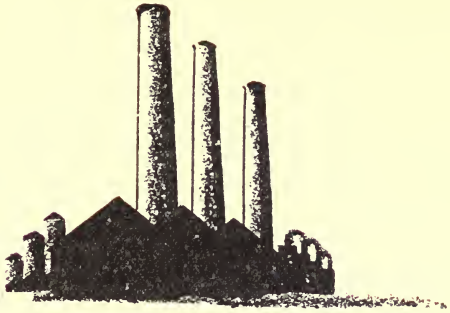


NON-PRODUCTION

Poor America! Its inhabitants have never had enough to eat. The supplies of milk, butter, beef, mutton, fruit, eggs and green vegetables have been insufficient even in its most prosperous years.

To meet the far from luxurious dietary standard set by the Department of Agriculture would require 177 billion pounds of milk. Only 100 billion pounds were provided in 1929 by our dairies. Forty-five billion eggs are needed. Thirty-one billion eggs were laid. Seven billion pounds of beef are required. Less than five billion pounds were produced.

But food is the least of the shortages, though perhaps the most serious. There is also a lack of clothing. The men of the United States had to be satisfied in 1929 with half a new suit of clothes a piece, and one sixth of a new overcoat. Since then, their clothing budget has been drastically cut. The housing situation is even more deplorable. Two-thirds of the 30 million American families live in shacks and slums.

Half a million of these are unfit for human habitation. One million seven hundred thousand city dwelling units are in need of structural repairs. Four million city homes lack indoor toilets. Over five million lack baths or showers. In six million urban houses cooking is done without gas or electricity. Most farm houses are not equipped with any modern appliances whatsoever. Actual living conditions contrast sharply with the rosy picture of a land of plenty still widely current among those who do not check notions against facts.

This widespread poverty, this lack of desired goods, is not new. It has always existed in human societies. But the poverty of today is due to other causes than the poverty of previous ages. In the past, poverty has been largely an unavoidable condition for the great mass of humanity. Productive equipment used to consist of simple tools: at first crude implements of wood and metal, later well finished tools, but still tools that required muscular effort in order to provide the necessities and luxuries desired for living. With the partial command over nature permitted by tools and the first machines, most goods were scarce. They never existed in desired quantities, and most men had to work from morn to night in order to provide the bare essentials of existence.

Today the situation is different. Not only has man perfected many of his tools, but he has also acquired an inanimate slave, known as natural or extraneous energy — energy generated outside of himself, which is capable of exerting strength and doing work equivalent to that of thousands, sometimes millions, of flesh and blood humans.

Consequently poverty today is due neither to the stinginess of nature nor to the technical incompetence of man. It is due largely, if not entirely, to the curious practice of producing less of the things we need than we are equipped and able to produce. This practice may be called "the practice

of non-production." Although energy is available in the form of coal, petroleum or electricity, and millions of men are ready, in fact eager, to do what is necessary to set the factory wheels turning, productive equipment is not used a large part of the time. This is not only a curious practice but also very expensive.

Non-production is not new in the world. I daresay no tribe ever lived on the face of the earth that has not practiced it to some extent. The observations of anthropologists are filled with reports of non-production based on every variety of prohibition and restriction. Such prohibitions are known as taboos. Many of them once had a useful or at least an understandable purpose. But they often persisted long after their usefulness had disappeared.

Iron was once taboo in widely separate localities. An unwritten law forbade its use. The reason behind this prohibition was the reluctance of the bronze users to adopt a new metal — one might even say, the opposition of the vested interests of the bronze age to the introduction of this new material. But as time went on the metal came into general use in spite of the taboo. Yet the effects of the taboo persisted. Centuries after iron had become plentiful we find Roman and Sabine priests shaving themselves with bronze razors. And even in the 19th century we find John Ruskin crusading against the use of iron in architecture. Why, we might ask? Very possibly, in fact very probably, as a result of the taboo which had long since been abandoned by most civilized peoples. And it is worth pointing out that it is taboos of just this type, concerned with the production or consumption of some commodity or other, which seem to have been most costly in the history of man.

For example, the inhabitants of the island of Mantewei, off the coast of Sumatra, are even today forbidden to labor

in the fields during periods of fiesta which are called whenever a new priest's house is built or a new religious officer is invested. Such celebrations occur frequently and last a long time. No doubt the custom was established to obtain the full cooperation of the community for building operations and religious ceremonies. But as a result of this self-imposed restriction, the ancient people of Mantewei have been and are still deprived of milk and rice, since both the tending of cattle and the cultivation of rice require uninterrupted labor. Consequently this people of Malay descent are poorer than their neighbors on the mainland, although of an equal cultural level.

Some of these traditional customs are beneficial. Others represent restrictions which have outlived their usefulness. It would be a mistake however to think that this strange phenomenon, this failure of man to take full advantage of his facilities for wealth-creation occurs only in far away places. We in America today are guilty of the same practice, for we do not produce all the goods and services which could be produced. This statement requires no elaborate proof since at the moment of writing some ten millions of our customary working population are kept in idleness or directed to occupy themselves with activities which are frequently of no particular use to anyone. At the same time many a factory is idle, most of the others are operating only part of the time and a percentage of our farmland has been withdrawn from cultivation. This practice extends even to the professions. The services of many thousands of doctors, teachers, engineers, architects, etc. are not being utilized. Non-production, in fact, extends to nearly every phase of our existence; and it is to this practice that the poverty of today must be attributed.

But why should so costly a practice be persisted in? Why should Americans, a technologically proficient people,

not take full advantage of their opportunity to produce goods and services in sufficient quantities to satisfy their needs and reasonable wants? The answer is not difficult to find. It is simply this: — that Americans, like most other people, regulate their lives by many curious traditional customs, some of which represent restrictions which have outlived their usefulness. Among these there is one which is especially instrumental in holding Americans back. Because of their concept of property, they produce nearly all wealth only in order to exchange it for symbols or tickets known as "money." *Unless an inhabitant can be found willing and able to give up money for an item of wealth — whether it be a material commodity or a service — the commodity is not produced and the service is not rendered.*

Of late, as is well known to everyone, most of the citizens of this continent have had difficulty in obtaining money. In fact, the amount of money — that is to say, the number of "dollars" or tickets — coming periodically (week, month or year) into the possession of the inhabitants, has been so inadequate that the production of the community has been halved, and the great majority of the population has been deprived of much wealth which could be, but is not, created. Thus this custom or taboo, which prohibits the production of wealth unless this wealth can be exchanged for dollars, results today in general poverty and individual destitution. It would seem as if this prohibition is the most expensive taboo that ever obsessed a great people.

How has it come about that a nation, whose genius has been largely concentrated on solving the material problems of living, should surpass all previous societies in restricting the production of wealth?

To answer this question it is necessary to look at the process by which people alter their life-ways. For even a

superficial glance at history indicates that life-ways do change in the course of time. And the particular life-way we are investigating, the practice of limiting the production of wealth to the buying power of the people, is of recent origin.

What we must recognize at the outset is that we are here dealing not with one world but with two. The first is the world of nature, the world of the physicists. Because it exists outside of us this world is usually thought of as the real or objective world. It can be observed and measured. And any conclusions which we reach in regard to the world of nature can be checked by trial and error experimentation. For since it exists outside our minds, it reacts similarly no matter who measures it. When dealing with the world of nature we must observe the laws of nature. One cannot build a dynamo unless one has studied electricity.

The second world is subjective and consists of habits, conventions and institutions. Although it touches our lives at every point and cannot be evaded by any member of society, yet it has not the same basic character as that of the world of physical fact. This is because it is a creation of man. And as it is man's creation, man can alter it at will. Furthermore it is difficult to fix or to measure this second world, since it is in continuous flux or movement. We try to fix certain of our institutions by describing them in writing and enacting them into law. But since words, also, are created by man, and change as man puts new meaning into them, it is impossible to crystalize human life-ways even though man has always tried to do this very thing.

In actual life we accept the reality of the physical world. And how could it be otherwise? One is burned by touching a red hot iron no matter how convinced one may be that the iron is cold. Our fields of corn shrivel up if they obtain no water, no matter what incantations are muttered. Yet accept-

ing the reality of the physical world is not always easy, for sometimes it does odd things to certain of our conventional ideas.

Take wealth for instance. In the physical world it consists of desired goods and services that exist in limited quantities. Sand is wealth in a city in which concrete houses are being built, but not on the open beach. Similarly, money, securities and other certificates of ownership, looked at in this light, are not wealth but mere symbols of wealth. Money becomes a kind of ticket, the medium of exchange. Thus it works out that poverty, in the physical world, represents a lack of desired goods and services. In the second world however, the world of institutions, poverty is a lack of money. And so dominated is our thinking by custom and tradition that we are still apt to think of poverty in the second sense.

In our frame of reference, that of the physical world, the cause of poverty is therefore simply a lack of goods and services; for these can neither be hoarded nor accumulated except within narrow limits. In the world of institutions, however, poverty may be caused by a bad division of tokens or money, since money can be hoarded and accumulated without end.

Let us take a concrete example which will show how differently things appear in the two worlds. In the physical world the years of 1923 to 1929 were an orgy of saving. Industrial equipment was expanded at an unprecedented rate. New factories were built, new pipe-lines laid down, new buildings erected at the greatest rate in history. These were "savings" in a true sense, since they made it possible to provide wealth in the future by sacrificing time (man hours) in the present. However from the conventional point of view this same period 1923 to 1929 was an orgy of extravagance. Money was created and money was spent, fast and furiously.

Again, the years 1930 to 1935 were, in the physical world, years of an unparalleled extravagance. Millions of men were disemployed, their potential efforts wasted, mines were flooded, fields left fallow, machinery allowed to rust. It was a period, in other words, during which we were recklessly throwing away opportunities that might have improved our lot as a people and given us substantial returns in the future. On the other hand, from the conventional viewpoint, these same years were notable for their penury. Banks sought liquidity, individuals watched their spending, industries refrained from expansion.

Obviously the two worlds do not coincide. For example, take the concept "value." This concept does not exist in the physical world. There are no demonstrable values in nature. We have an opinion that nature values "life," but we cannot measure it and thereby prove it. For this reason the concept is ruled out of physical research.

Yet "value" is a fundamental human concept. It is the basis of all life-ways. It is of critical importance to the individual. Each of us values *this* and does not value *that.* Consequently, in the borderland between the physical world and the world of human institutions, known as economics, we shall accept the fact that people desire things. For economics partakes of both worlds, the world of physical fact and the world of human desires.

Obviously, if there are two worlds which do not coincide but which are interrelated at every point, trouble can result from the threads getting tangled. Our methods of physical work may not jibe with our institutions of social life. In fact the expensive taboos which we have already cited, are instances of this very occurrence. The Manteweians know how to cultivate rice and tend dairy cattle. But they are forbidden to do so by an old custom which was adopted before

the consequences of preventing sustained labor in the field had been recognized.

This obviously is a maladjustment, and to correct such a maladjustment it is always necessary to alter the institution or convention which causes it. This can be done. For though man cannot alter the laws of nature he can adjust his own institutions, since laws, customs and institutions are his own creation. But as man strives to adjust his customs or life-ways to the needs of physical living, delays often occur. We may call such delays "institutional lags." These are not at all unusual. On the contrary, lags of this kind have been the rule in man's history. Mankind seems to cling more fervently to those habits which pertain to the institutional world, than he does to the habits which are concerned with his battle with nature. He is more easily persuaded to adopt a new tool than a new curse or a new custom, for example. But this may be because the advantages of the new tool can be demonstrated by measuring its effects while the benefits of a new custom, despite trial and error experimentation by individuals, are subject to opinion. Though such an institutional lag is usual it is none the less a serious matter. It may, if continued too long, lead to irretrievable disaster. Perhaps I can best indicate why this is so by an example.

Gunpowder was invented in the middle ages. Many peoples eagerly accepted this new explosive with its ability to kill an enemy at a distance regardless of protective armor. Gunpowder therefore was widely adopted. Cannons were developed and, a little later, small individual cannon or blunderbusses. But many communities persisted in the old way of fighting. They continued to send out heavily armored knights on horses with spears and pennants. Meanwhile other communities had armed the rank and file with the new death dealing weapons. The result of this technological

innovation or, looking at it in reverse, of this institutional lag — of this failure to keep abreast of the times — was not only the defeat and slaughter of the laggards but also the eventual destruction of the existing social economic set-up known as feudalism which expressed itself in armored knights and traditional rules of combat.

Or take the case of poverty. Poverty has been thought of as a natural, inevitable evil. "The poor are always with us" is an expression of the belief that poverty resides in the nature of things and must be accepted as one accepts death and the hardship of growing old. As a result, much traditional advice is devoted to persuading us to bear poverty and the ills which go with it — disease, crime, warped character, ignorance, superstition and so forth — with calmness or at least resignation.

But what if poverty does *not* reside in the nature of things? What if the poverty of today is due merely to an institutional lag, to a failure to make the most of our present knowledge and productive equipment? Then it would seem as if action rather than resignation is called for.

With this thought in mind some of us have been studying the workings of our economy. Does America manage its house efficiently? For the word "economy" comes from two Greek words, one meaning "house," the other meaning "to manage". Or does our society, because of its fondness for an old institution, cripple its new tool, modern technology, and thus prevent better life-ways from unfolding?

THE NATIONAL SURVEY

Could American Industry produce sufficient goods and services to satisfy the needs and reasonable wants of the total population? If physical factors and knowledge were the only limitations on production, and goods were created for use and enjoyment regardless of the money in people's pockets, what could everyone actually have?

In order to discover the answer to these questions, and to provide definite and accurate information on the capacity of the "American Plant" in respect to the needs of the American people, a project was set up by the CWA in 1934. A group of engineers and economists were appointed to study every department of our economy and to draw its conclusions from the information thus obtained.

The project was called the National Survey of Potential Product Capacity.

This project undertook to determine the product capacity of American industry. It undertook, in other words, to estimate the quantity of desired goods and services which

could be produced, if production were limited by physical factors only.

But how was such an estimate to be made? Let us suppose we desired to discover the product capacity of the automobile industry. The capacity of iron mines, blast furnaces, steel mills, glass foundries, tire fabrication, carburetor factories, assembly plants and so forth could all be determined. The various answers could be put in the form of percentages and an average taken. But such a procedure would not give the required information. We still would not know how many cars the American automobile industry could turn out, for such a method of procedure would leave out of consideration one of the most important factors involved.

Consider the iron mines, for instance. Can these mines produce enough ore to provide the full iron requirements of the automobile industry? Obviously they can since automobiles take only a part of our annual iron supply. But how about tires, nearly all of which are used for automobiles? Can our tire fabricators provide us with enough tires? This is not so simple to solve. Before we can answer this question we have to know how many tires we shall need, and this we cannot tell before we know how many automobiles we can fabricate.

But how can we find this out? The problem narrows down to this — that somewhere along the chain of events by which automobiles are produced there will be one process which will act as a limiting factor to all other processes. In other words, just as beer, for example, will not flow from a bottle any faster than the opening in the neck of the bottle will permit, so automobiles cannot be produced any faster than the limiting process will allow. In the case of the automobile industries this limiting process, this "bottleneck,"

might be the assembly plants; it might be one of the fabricators of parts; it might conceivably be the glaziers, or the labor supply or even the capacity of the rubber plantations on the Malay peninsula. It might be an even more obscure factor. In any case such a bottleneck will exist, so that the problem of discovering the capacity of American industry to produce automobiles depends in the first place on the investigator's ability to locate the bottleneck which limits our ability to produce automobiles. In actual practice this would amount to selecting a probable bottleneck and then testing it to see if the choice had been correct.

It was a similar method which the Survey devised in order to determine the product capacity of the American plant. To begin with, a bottleneck had to be selected.

Manpower seemed at first glance to be the logical limit on our ability to produce. But if manpower had been accepted as the limiting factor, a fantastic answer would have resulted. The possible working population of the United States can only be guessed at, but it must be somewhere between fifty and eighty million (since forty-eight million were listed in the 1930 census as gainfully employed). And fifty to eighty million men and women could, by using modern technology, produce wealth probably far beyond society's desire to consume wealth; for man can eat only so much, go to the theatre only if he has leisure, etc. Also, if manpower were the only limitation on production then we would have to assume the best possible equipment and technology. But owing to the fact that only a few factories and processes today are really up-to-date, obsolete machines would have to be replaced and workmen would have to be re-educated before we could take full advantage of our manpower. To make such a change in the workways of the population, to replace obsolete machines and to

re-educate most of our workmen, would be a long and difficult job which might never be completed. Since the National Survey was interested in the problem of here and now, rather than in some hypothetical future, narrower and more definite limitations on production had to be chosen. Therefore, instead of choosing manpower, the only absolute limitation on production, the National Survey accepted three contingent limitations for its bottlenecks. These were: natural resources, the existing equipment and the customary labor force. The word "contingent" is employed because these limitations are in no sense absolute. Natural resources could be exploited more effectively than they are today; existing equipment could be replaced by better equipment; and the customary labor force could easily be expanded. But by choosing these bottlenecks, the far from efficient existing productive set-up was accepted as the limiting factor. This was done deliberately in order that the results of the study should be beyond question.

With the bottlenecks decided upon, a method had to be devised by which information on the various productive processes could be translated into an estimate of finished consumer goods. This is so, because only consumer goods and services are of value in themselves. Capital goods, as well as other forms of wealth, are merely instruments, useful only in so far as they serve to provide consumer satisfactions. A flour mill for example is of value only because it serves to prepare wheat, corn, etc. for consumption.

In order to be able to present the conclusions in terms of consumer goods, the Survey had to invent a special technique. It was compelled to devise this new method because the method followed by previous inquiries, that of averaging various product capacities, resulted in a meaningless percentage. No averaging of the capacities of iron mines, steel

rolling mills, assembly plants, etc. would indicate how many motor cars the American people might expect if they should choose to command a maximum production of motor cars. Nor would even an averaging of iron mine capacities and blast furnace capacities give the number of iron pigs that could be produced.

Therefore a method had to be worked out which would present conclusions, not in the form of a percentage or rate of operation but in the form of finished consumer goods. For this reason the Survey estimated and listed each specific capacity, and then translated each finding into its particular significance for the next item of the process. To do this, it put down its findings upon a flow sheet, starting with raw materials and ending with consumer goods and services.

Let me try and make this clear by describing certain of the concrete steps which were taken.

Having decided upon a method, the first bottleneck, natural resources, was studied in order to discover what raw materials could be made available each year. Then each raw material item was traced through the various processes which it underwent in order to prepare it for human consumption. In the case of coal, for example, a fraction of the supply needed had only to be dug out of the mine, sorted, transported and delivered in order to turn it into household heat. The rest of the available coal underwent more elaborate transformation. It reached the consumer as the constituent of a perfume or in the form of a pair of scissors. In the latter case, practically all of the coal disappeared in the process of producing steel.

Just as with coal, every material had to be checked through each transformation or process to discover whether or not bottleneck number two, the installed equipment, was adequate to perform the task required of it. By this means

a list of desired consumer goods and services was gradually approached.

In creating the flow sheet three facts had therefore to be ascertained: (1) the quantity produced in 1929, the year of maximum production, (2) the quantity which the equipment in place could have turned out if it had been operated at practical capacity, (3) the quantity which the American people would have consumed if they could have consumed what they liked.

The inclusion of this latter quantity is probably the most important of the various innovations which the National Survey devised in order to solve the problem in a scientific manner and thus insure the soundness of its conclusions.

To discover the capacity of any one industry, such as the automobile industry of which we have already spoken, the investigator need not concern himself with the *magnitude* of his result. He might discover that the United States could produce 6 million cars a year, or 10 million cars a year; in either case the answer would have been satisfactory since his previous research had indicated that the necessary materials, equipment and labor were available.

But if *all* of industry is included in the scope of the research, the magnitude of the final conclusions must be considered at the very start of the study. This is because even at the raw material stage, supplies have to be allocated, have to be assigned, to one final product or another. If the automobile industry alone were to be considered, one would discover at once that sufficient iron ore was available to provide any possible output of motor cars, and the supply of iron ore could be dismissed from further consideration. If all industry is to be surveyed, the distribution of the available iron must be carefully allocated to the various industries

which require this material so that it will be utilized to the best advantage.

The only possible basis for allocating supplies is with reference to consumer needs. Thus the National Survey had at the start to ascertain what goods and services were desired by the American people. The list of these goods and services was called the "Budget," and "product capacities," that is to say, possible production, was checked against this ideal standard.

The Budget fulfilled another purpose of nearly equal importance. It served as a limiting boundary which it was useless to exceed. For it was found that certain commodities could be produced in quantities greater than are required for domestic consumption — flour, for instance. Thus, the unused capacity of our flour mills was simply not incorporated in the final figures since it would obviously have been beside the point to incorporate excess capacity in an inquiry devoted to discovering whether or not the American plant could satisfy existing American needs. Therefore the excess capacity of our flour mills was omitted although the wheat not required for home consumption was included in the list of commodities which we might exchange in foreign parts for commodities not economically produced in America.

But to return to the matter of the Budget — how was an estimate to be made of the goods and services Americans might need and want? This did not prove as difficult as might have been expected.

If one is limited to the material world and uses the contemporary way of life as a basis, the problem is definite and assailable. A man can eat only so much. He does as a rule only one thing at a time. Consequently even in the vague field of recreation, limits do exist. Of course if

aesthetic and spiritual desires be included, human needs may be considered to be infinite. But these special categories are beyond the scope of a statistical survey of production and consumption. An increase in these was therefore not incorporated in the Budget.

FOOD In this field the United States Department of Agriculture had done the work. A pamphlet known as "Diets at Four Levels of Nutritive Control and Cost" had listed under the heading of the Liberal Diet, just what a family requires in the way of foodstuffs in our climate in order to maintain its maximum efficiency and growth, and to provide meals gratifying to the taste. This diet, plus the luxuries imported in 1929, such as caviar and champagne, was used by the National Survey for its food budget.

Luxuries both domestic and imported were included so that the budget (what we should have) could be compared to 1929 production (what we did have). Also there is no reason to cut off luxuries in order to provide essentials. The Survey however did not study the possibility of expanding the production of luxury articles such as custom-made clothes, hot house grapes, works of art, etc. The supply of these could doubtless be increased, but this problem lay outside the scope of its study. It was merely assumed that such goods could be provided in the same quantities as have been available in the past. And the necessary supplies and manpower were therefore allocated to their production.

CLOTHING Requirements in this field obviously vary. No one knows exactly what covering is best physically and esthetically for the human body in North America. Consequently the National Survey was governed by custom.

Many surveys have been made of what people wear in

the way of clothing. Most of these were of no help to the Survey since the individuals studied were inhibited in their purchase of clothing by a lack of money. However, one study served adequately. It was conducted by the Heller Committee of the University of California, and listed among other things the clothing purchased by members of the professional class in Berkeley, California, in the year 1929. The average income of the families, about $6,000, did not permit of the full satisfaction of every material desire. Yet their wardrobe represented probably a truer picture of what Americans want in the way of clothes than would have been the wardrobes of families in higher income brackets. This is true because the prestige of these professional families does not depend on their ability to acquire new clothes at frequent intervals. At the same time their ability to purchase what they want, though limited, is high in relation to the average standard. Less than 6% of the population enenjoyed an equal or greater income in 1929.

To this budget consisting of the items used by the professional families studied, was added the luxury, or handicraft, clothes actually produced in 1929.

HOUSING In this field a broad assumption seemed the most satisfactory basis for the budget of the National Survey, namely, that everyone would like to have the use of a room and a half, on the average. Less than this would prevent that privacy, that ability to seclude oneself, which is so useful for the full development of the individual's personality; more than that would become an encumbrance unless one had assistance, now supplied by domestic or other help, in the upkeep of the space. Since no expansion in the serving class could be expected if production were released and people's wants gratified, the Survey allowed in its Housing

Budget a room and a half a person, or a six room house or its equivalent for the average family of four. Ample space was allocated, some 1,500 square feet, for six rooms in the individual houses (average room 16x16), and full equipment. Household supplies were also included in the Housing Budget.

TRANSPORTATION Insofar as productive factors are concerned, we could more than provide every family in the country with a car. We could not provide more cars than this, without replanning our cities and expanding the equipment used for the manufacture of gasoline. Since the Survey accepted the existing plant and equipment as a limiting factor, 6 million cars a year were budgeted, sufficient to provide a car a family, assuming only a five-year life per car.

But how about our public agencies of transportation — railroads, busses, ships, etc.? These could of course carry many times the number of passengers they do today. On the other hand it is known from the statistical data available that an increase in the use of automobiles tends to decrease the use of railroad and other public travel facilities. In view of this circumstance, the Survey budgeted only a 50% increase in public agency travel. This was done on the assumption that an increase to this amount would be welcome for seasonal migrations on vacations, even if the private automobile continued to be used increasingly for ordinary travel.

MEDICAL CARE The doctors in their published Medical Quarterly had estimated the cost of providing adequate medical care for the American people. Since their estimate does not seem to include the cost of those special services which individuals in the higher income brackets enjoy and which the medical profession could continue to provide, the

Survey's budget, which accepted the doctor's estimate of $42 worth of medical service per person per year is undoubtedly low. On the other hand, it may be regarded as high when we consider that an extension of preventive medicine, the providing of the liberal diet and the guaranteeing of economic security, would lower the incidence of sickness. It is probable however that in actual practice the two factors would more or less average out.

EDUCATION Advice was sought of Dr. Goodwin Watson of Teachers College, Columbia University, in regard to what was considered necessary in order to educate the American people according to accepted standards. A tripling of present facilities was recommended, and was adopted for the purpose of the Survey's budget.

Certain considerations of an opposite nature were considered but dismissed as irrelevant. For one thing, is education possible today? Can our schools and colleges prepare the young for life?

Reading, writing and arithmetic are at present successfully taught in our schools; also a smattering of what passes for science, philosophy, economics, etc. But is the latter knowledge, and is the former useful? The mere technics of living which are necessary to enable an individual to make his way in the world, are today of questionable worth. If the individuals who are coming of age will have *no way* to make, they might be better off if they were left unequipped. For those unable to function in society, would probably suffer less if not equipped to function.

If, however, we should choose to alter our institutions so that they made the most of the already accomplished technological revolution, then we should not only revise our so-called knowledge in the light of what we now know but in

general suppress, but we should also encourage the young to think for themselves. Such a course would be unprecedented in history, probably impossible under the present set-up, and certainly of world-shaking consequence.

In spite of the fact that literacy today fosters dissatisfaction, since it enables the individual to become aware of all he might have which he does not get, the National Survey accepted the advice of Teachers College and budgeted a threefold increase in education.

RECREATION So much of life in the contemporary world falls under this broad heading, and the various kinds of recreation are so intertwined with the other outlets for time and energy, that the mere estimate of what was being actually spent for recreation in America, offered difficulties. The National Survey first cleared the field, so to speak, by deducting from this general category all recreational activities that had been covered under some other heading such as railroad travel, motoring, food and drink consumed in restaurants, night clubs, etc. This left theatrical spectacles, contests, music, including the cost of the radio, outdoor and other activities, and foreign travel as the main recreational divisions. The movies on which some 2 billion was spent in 1929, amounted to one-third of the total bill.

When it came to preparing the budget, the problem was further complicated by the fact that an individual's needs and wants in this field are intimately associated with his status and occupation. And the status of many individuals would be altered if the balance of the budget — the food, clothing, and housing requirements in particular — should be provided. For example, today over ten million individuals and their families are on indefinite vacations with

only enough income to buy the barest necessities. To fulfill the budget, to create the goods and services listed therein, these ten million would have to work. Therefore instead of estimating their needs and wants as of today, it became necessary to estimate the recreational needs and wants of these individuals as of the time when they would be usefully employed and would be receiving short vacations on full pay.

Despite these difficulties a budget was finally worked out allowing about double the recreation enjoyed today. This assumption, that America would like to indulge in twice the present recreation, may be questioned from two opposite points of view. On the one hand, it might be contended that if economic pressure were relieved by producing and distributing the additional wealth that we are technically able to provide, the population would indulge in an orgy of pleasure seeking. Perhaps the Survey was ultra conservative in only budgeting a 100% increase. On the other hand it might with equal reason be held that the release from worry resulting from a guarantee of economic security would remove a large part of the pressure which now impels people to seek recreation outside the home. Consequently the budgeted recreation would not be indulged in.

This argument cannot be answered in advance. The Survey took an intermediate position and allowed a larger increase to outdoor activities, than to vicarious enjoyments such as theatres and other spectacles.

In order to sum up the various categories just described, the Survey had to translate them into some common denominator. To do this all the results were translated into 1929 market values. You can't add apples, haircuts, and horses in any other way. The reason that the Survey used market values in 1929 dollars rather than physical measurements is

because no physical measurement applies to all goods and services. Several physical yardsticks were suggested as common denominators. For example: man hours and ergs. But neither of these was satisfactory. Man hours are impossible to calculate owing to the fact that a full man hour accounting would include an infinite series reaching into the past: the man hour cost not only of the specific production but also the man hour cost of building the factory, of manufacturing the tools to build the factory, of the materials that went into the tools, of the man hours that went into opening the mine that produced the tool metal, and so on ad infinitum. Also man hours are an uncertain measurement since the skilled craftsman's hour is certainly more productive than the common laborer's. The other suggestion, the erg or kilowatt hour, was found similarly unsuitable. It is subject to the first of the above objections and also does not apply at all to many of the services, doctor's care, for example. Consequently the Survey had to make use of our every day dollar in order to obtain a common denominator.

The dollar, too, has disadvantages. It is not part of the world of nature and is therefore not a scientific measurement. It is expressed in prices, and prices are often set by the interaction of two forces known technically as the "available supply" and the "effective demand."

Available supply is a physical fact. It is the quantity of any commodity available for sale at any given moment. Since it can be measured (the number of pounds or bushels of potatoes, for example, available at any time), the available supply can be studied statistically.

Effective demand on the other hand is the buying power of the people. It pertains to the institutional world and corresponds to nothing in the physical world. We used to

pretend that it bore some relationship to the amount of gold in a country but this notion has been effectively exploded during recent years by the actions of various governments. Consequently market prices, which are the product of two quantities, one belonging to the physical world and the other to the institutional, were ruled out of the Survey's research. Physical measurements were used exclusively, pounds, yards, kilowatt hours, tons, etc.

But when it came to presenting conclusions, market values had to be used since the physical measurements were not of universal applicability. That is to say, if we had used weight as our measuring yard we would have had to add up the weight of automobiles and the weight of an admission to the moving pictures. Obviously, such an addition would have been impossible.

However, in order to use "market values," even for presenting conclusions, the Survey had to limit them by one condition. It had to use market value of a certain moment of time. Since market values are continually changing, relationships cannot be shown unless we take a cross-cut of time and stick to it. Thus the price of peas on December 30, 1929, bore a certain relationship to the price of football tickets on that date. But if we used the price of peas in 1929, and the price of tickets in 1932 we would not show their relationship because nearly all prices went down between 1929 and 1932. Consequently the Survey used the same market values throughout its calculations. Those of 1929 were chosen and it is in these terms that the conclusions of the Survey were finally worked out.

The following table shows the relationship between the various divisions of consumer satisfaction as realized in 1929, and as budgeted by the National Survey.

GOODS AND SERVICES PRODUCED IN 1929 (NATIONAL INCOME)
Compared to Budget translated into 1929 Market Values.

ITEM	1929 Production *(What we produced)*	Budget Value *(What we should have produced)*
Foods	$26,919,235,000	$30,692,000,000
Wearing Apparel	10,176,959,000	16,769,300,000
Housing, etc.	25,339,358,000	29,700,500,000*
Transportation	11,291,334,000	14,484,219,000
Personal	6,905,060,000	8,985,000,000
Health	3,256,799,000	5,111,000,000
Education	1,472,187,000**	12,612,000,000
Recreation	6,218,390,000	12,187,000,000
Miscellaneous	4,973,572,000	4,975,000,000
TOTAL	$96,552,894,000	$135,516,000,000

Note * — This figure includes only the rent of the new houses which could be built in one year. The housing budget would eventually approach 50 billion dollars.

Note ** — Public education is not included in the production column since it is paid for out of taxes and is therefore already included largely under housing cost.

It is apparent from this table that a general doubling of production is not desirable. Twice the food produced in 1929, could not be eaten. Twice the clothing is more than is needed. On the other hand, a more than doubled rate of house building would be required to house the population according to modern standards although this is not indicated by the table because only the rent of the new houses which could be built in the first year is included. Twice the medical care is more than our doctors say is necessary to care for us properly, whereas twice the teaching would be useful and twice the recreation most agreeable.

In other words an increased production all along the line without reference to consumer needs, would be of doubtful worth. This is one of the reasons why the National Survey directed its inquiry toward a desirable norm — the

Budget — instead of confining itself to an inquiry concerned solely with the physical capacity to produce.

The Budget then is an estimate of the needs and wants of the American people. If it were provided, every one in America could enjoy that standard of living which is considered desirable in this country. The Budget also included the luxury items, the goods that are intrinsically scarce such as custom made clothes and works of art which certain of our people enjoyed in 1929. But no study was made in regard to increasing the supply of these. Instead such scarce goods were carried over from 1929 unchanged, since even though we did not study the possibility of increasing their supply, it need not be supposed that their supply would decrease.

Thus, the Survey was concerned mainly with finding out whether the Budget could be provided without improving our equipment or increasing our labor force: whether, in other words, it could quickly be made a reality by merely utilizing more fully our human personnel and our industrial plant.

THE FINDINGS

In order to make definite the scope of the problem, the bottlenecks, or limitations, had first to be established. The limitations chosen were (1) natural resources, (2) existing equipment and (3) customary man power. Starting with the supplies or raw materials which our *natural resources* make available, each item or commodity was "processed" or translated into another commodity to whatever extent the *existing equipment* permitted. By this means a "Budget" of desired goods and services was approached. Then the various operations were checked through again to discover if sufficient *man power* was available to run the plant at the speed necessary to provide the Budget. Finally, the whole operation was resurveyed, particular emphasis being given to the "kinks" in the pipe line; that is to say, to the spots where only a narrow margin of safety existed or where a shortage of some desired goods or services impended. In such places "prevailing technology" was referred to in order to find out if a better or alternative process or method would not remove the difficulty.

To make this proceeding clear the three basic operations had best be described in some detail. The first, concerned with natural resources, comes down to a study of what raw materials are available each year in the United States on the basis of our natural and industrial resources.

RAW MATERIALS In 1929, 55% of our raw material bill consisted of food products, including not only all foods necessary to life but also many exotic fruits and vegetables which are grown in tropical and semi-tropical regions.

Nevertheless, comparing actual production to what we needed to fulfill the schedule of the Liberal Diet as worked out by the Department of Agriculture, we find that the supply of several important foods fell decidedly short of the population's requirements. For example in 1929, we lacked by this standard 77 billion pounds of milk, seven billion pounds of vegetables, 20 billion pounds of fruit and two billion pounds of beef. These shortages were not caused by the fact that our soil is infertile, or our climate harsh, or our farmers lacking in enterprise. On the contrary soil, climate and farmers are capable of easily exceeding their customary production schedules.

In every case the shortages were the direct result of an absence of buying power. In other words, certain desirable foods were not produced in greater quantities for the simple reason that people lacked the money to buy more of them.

Take the production of fruits, for example, a considerable quantity of which were left unpicked and unshipped. Or consider certain other food items notable for their relative cheapness, such as potatoes, wheat and pork — all of which were produced in quantities greater than those called for by the schedule of the Liberal Diet. The explanation is not hard to find. It is simply this: that our farmers at present are

forced to concentrate on producing the cheaper food items which our population can afford to buy, and certain staples which can be exported, even while fruit is allowed to rot on the trees and many other important items of our diet are not produced in sufficient quantities.

The study of the National Survey in this field revealed that the cause of the various shortages is artificial, that is to say, institutional, or man-made. It showed that if our people's buying power should be based on the ability of our producers to create wealth, there is absolutely no question but that our farmers could raise the commodities needed to supply the Liberal Diet, plus such luxuries (hot house grapes, etc.) as were produced in 1929.

Some delay would occur in several items, milk and fruit for example. It would take several years to make the needed increase in either the number of milk producing cows, or the productivity of the dairy herds. Similarly, trees require quite some time before they begin to bear fruit. But in the latter case, berries, which are the equivalent of fruit from the point of view of the dietician, could be used as a substitute. By and large it seems likely that it would take longer to persuade those of our people unaccustomed to consuming proper food to alter their dietary habits, than it would for our farmers to step up production to the requisite level.

Therefore in the department of food, so far as raw materials are concerned, no difficulty need be expected in fulfilling the Budget of the National Survey.

Nor was any reason found for shortages among those other commodities produced by our farms which cannot be classified as foodstuffs. Twice as much cotton for example is habitually grown as can be sold in America. Even if the clothing budget were provided, there would still be cotton to spare for export. And this surplus could easily be brought

up to its present level by making use of more fertilizer and of the new cotton picking machine so as not to make greater demands on labor. The same may be said of tobacco and most of the other farm staples now grown in quantities sufficient for large exports. Additional wool and leather, a supply of which it would not be possible to increase immediately, could be imported until the herd and flocks had had time to increase. In order to make such imports, numerous other commodities would be available for export, in particular manufactured products and machinery as will be seen later.

Next the attention of the Survey was turned to forest products which constituted 5.3% of our raw material bill in 1929.

The forests of the United States are estimated to have once occupied 822 million acres. Some 353 million acres of the original forests have since been removed from the forest category and presumably placed under cultivation, leaving 469 million acres available for use as producing forest. Neglecting the effects of reforestation and improved forestry, the nation can count at present on an annual growth of only some six billion cubic feet of timber, roughly 35% of our annual timber requirements. Where, then are we to get the remaining 65%? It is now being drawn largely from our dwindling supply of virgin timber, thereby reducing the possibilities of future timber supply. At the present rate of consumption and growth our supply of timber will run short in from thirty to forty years.

This in itself is not serious from the point of view of consumption. Substitutes for wood — concrete, steel, asbestos as well as many new composite materials some of which are made from formerly useless by-products, such as corn stalks — exist in practically unlimited quantities and are

more satisfactory for many uses than cut timber. For example steel filing cabinets are more satisfactory and durable than wooden cabinets.

Although the impending shortage of lumber may be avoided by systematic tree planting and scientific lumbering, the Budget of the National Survey allowed for no increase in the use of timber. As a result all but 50,000 of the new houses budgetted, were specified to be built of materials other than lumber.

The next natural resource considered was fuel. Coal, petroleum, natural gas, etc., constituted 17.8% of our raw material bill in 1929.

We have enough high grade coal within the borders of the United States to last at present consumption rates, until about 5700 A.D. This fact insures the future of our high energy civilization at least in so far as physical factors are concerned. For not only is the consumption rate of the 'twenties certain to be reduced as modern methods of burning coal become more prevalent, but practically unlimited supplies of lower grade coal remain in reserve in case the better grades should be exhausted before other energy sources should be developed.

As for petroleum, twenty years ago it was thought that our deposits would be giving out in twenty years. Now the life of the known sources has been extended some scores of years. If the petroleum deposits should ever give out and no new wells should be discovered, petroleum could be extracted from oil shales, a mineral formation which it is not economic to exploit today; or oil sands, in which much oil remains after the well had ceased to flow, could be mined. These latter sources may be important some day in order to provide lubricating oils. Furthermore, if it should prove too costly to extract petroleum from the shales or the sands, coal can be

liquefied by several processes some of which are already in use in Europe. Finally unlimited alcohol can be produced from sugar cane, corn and other vegetable products. Thus fuel will be available far into the future. And in addition we have certain other energy sources such as water power, which are not dissipated by use. Consequently no limitation on our ability to provide the Budget need be expected from a lack of fuel.

Next the National Survey inquired into our supply and production of minerals which constituted 7.1% of our raw material bill in 1929. The United States is fortunate in having ample supplies of the essential minerals in sufficient concentration to make their extraction practicable. Our territory is particularly rich in iron, which is the basic metal required by contemporary technology. We also have adequate supplies of aluminum, copper, lead, zinc, silver, gold and most of the other metals. The same is true of the non-metallic minerals such as stone, sand, salt, etc.

Nickel, tin, vanadium, manganese, chromium, are not found in the United States in sufficient concentration to repay their mining. Fortunately these exist in ample supplies on other parts of the earth's surface and can be secured by trade.

In sum, bottleneck number (1), our natural resources, was given a clean bill of health.

The natural resources of our country are sufficient to provide not only the Budget but to exceed vastly this schedule if need should arise. The production of the several food items, now provided in insufficient quantities, could be stepped up to the desired rate very quickly, probably more quickly than our people could be persuaded to change their diet along the lines recommended by the dieticians. And these budgetted supplies could be made available by our farmers, wood cutters and miners without making fuller use

of the many proved inventions and labor saving devices which American industry could and should install.

The missing minerals mentioned above and the many other commodities such as tea, coffee, and silk as well as numerous less familiar drugs, dyes, etc., which are not produced in the United States can be obtained, as they are obtained today, by trade. But in order to procure these supplies other supplies must be provided for exportation.

The United States exported over five billion dollars worth of goods in 1929. We imported only 4,400 million. Therefore even on the showing of 1929, the list of imports could be expanded. To provide the budget of the National Survey additional raw materials — wool, leather and several other items — would have to be imported, since their production could not be increased immediately in this country. But the increased production of many items, in particular machinery, could be organized in a short time.

In developing the flow sheet, allowance was made for this necessity. Materials and men were allocated to the production of various items in quantities greater than were called for by consumer needs. By this means the importation of the missing items could be assured. Every nation today welcomes, in fact fosters, the exportation of raw materials. It is evident that this country can easily acquire by international barter such raw materials as it cannot economically or conveniently produce itself.

EXISTING EQUIPMENT Our country, so richly endowed with raw materials, is relatively even better equipped with machinery. In fact our industrial plant is both finer and bigger than that of any other territory.

But a great plant is of no benefit unless it is used. Even in 1929, America's year of maximum production, many of the

great basic industries were operating on a part time basis. For example our flour mills were operated at 57% capacity, cotton mills at 44% capacity, and so forth, as shown on the following table.

INDUSTRY	Percentage of Capacity	No. of Shifts
Flour	57%	3 (customary)
Slaughter Houses	51%	2 (1 shift customary, but 2 practical)
Cotton Mills	44%	3 (customarily 1 shift in North, 2 to 3 South)
Woolen Mills	38%	1 (Multiple-shift practical)
Worsted Mills	38%	1 (Multiple-shift practical)
Silk Mills	40%	2 (1 & 2 shifts customary)
Saw Mills	99%	1 (2 shifts practical)
Oil Refineries	84%	3 (customary)
Coke Ovens	91%	3 (customary)
Blast Furnaces (pig iron)	82%	3 (customary)
Steel Mills	86%	3 (customary)
Cement Mills	66%	3 (customary)

The percentages vary strikingly. The tendency seems to be that industries which are controlled largely by one or more large corporations are able to hold their productive capacities down near market requirements, while in those industries in which control is widely scattered among many small companies, capacity tends to overshoot market requirements.

Now let us leave market requirements as indicated by actual production and compare capacities to the requirements of the Budget. In 1929 our people consumed more than the liberal allowances of bread. Consequently the existing flour mills are more than adequate to supply our needs, and the fact that they were operated in 1929 at only 57% capacity, indicates an excess or unneeded capacity. The American people under-consumed beef, lamb, veal and poultry, and consumed slightly more than their quota of

pork. Consequently the existing slaughter houses will have to operate double shift part of the time or more animals will have to be slaughtered locally. Textile capacities are also adequate although cotton mills would have to be operated full time and wool, worsted and silk mills a greater part of the time in order to provide the clothing budget. Saw mills could continue operating at the 1929 rate since no increase in the use of wood has been budgeted. Oil refinery capacity is adequate although considerably more petroleum will have to be cracked when the budgeted automobiles are on the road. The coke oven, blast furnace and steel mill capacity of 1929 would not be sufficient to fulfill the budget and at the same time to replace plant at the 1929 rate. Fortunately since 1929 our capacity to produce steel has been expanded by over five million tons so that the steel industry can easily take care of the additional demands. The cement mills' capacities were adequate in 1929 and are adequate today to meet our budgeted cement quota.

A similar condition of adequate plant capacity exists in every other branch of industry in which an increase in production is desirable. True, we have chosen our examples from the lists of heavy industries only. But we have done so purposely since their equipment takes as a rule more time and more man hours to construct than that of the plants designed to fabricate consumer goods.

In general the United States has equipment in place capable of turning out the full list of goods and services budgeted by the National Survey. Many industries are in a sense over equipped. That is to say, society could fabricate, by using the machinery now in place, more goods of certain types than are needed to satisfy the nation's requirements — radio sets, for instance. Of course, this is all to the good from the point of view of society. It merely means that the better

plants should be used and those of an older, less economic design, discarded.

Furthermore there exists a 100% unused capacity in the machine tool industry. And machine tools are used to make machinery. This insures that any specific lack of equipment can be rapidly corrected and that our obsolete equipment can be progressively replaced by equipment designed in accord with more efficient and recent designs. In sum, the poverty of today, the lack of things our people need and desire, can be blamed neither on the inadequacy of our natural resources nor on the limitations of our manufacturing equipment, for we are generously supplied with both.

MAN POWER It is well known that a substantial number of people in America, variously estimated at from 10 to 20 million, are at present disemployed. It is also known that young people are coming of age at a rate faster than their grandparents are dying off; that a considerable number of able bodied persons are still living on farms although their labor is no longer required there; and that additional millions, especially women, would like to work but know not where to apply themselves. These conditions are well established as we said. Yet if our argument is to be complete we must check the labor requirements of the Budget against the labor supply available.

The National Survey, in order that its results should be beyond reasonable doubt, did not include in its estimate of available labor the unlisted man-power mentioned above, nor the man-power that could be released by reducing man hour waste; by abolishing unneeded gasoline stations and superfluous salesmen. It confined its estimate solely to the man-power supply listed in the Census.

On April 1, 1930, 47.1 million people were listed by

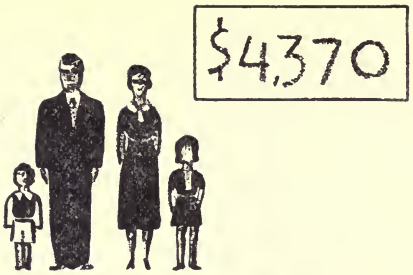
the Census of Occupation as gainfully occupied. This does not mean, as it would appear at first glance, that these 47.1 million were actually employed or working at the time the census was taken. For many of those who listed themselves as carpenters, plumbers or what not, did so regardless of whether they were employed at the time. When we compare the census figures with Senate Document 124, in which it is estimated that work performed in 1929 amounted to 44 million man years, it is apparent that even in 1929, the working time of some 3 million men accustomed to working was not utilized. However, 47 million man years were available even without counting those unaccustomed to work or accustomed to idleness, and without deducting duplicate and useless activities. Since that time at least three million more men and women — the difference between the number of young people growing up and the number of old people retiring from work — have been added to our working population. Consequently, counting only labor sources listed in the census, we have, exclusive of family farm labor, approximately 50 million out of a population of 125 million available for some kind of service.

The National Survey estimated that to provide the work needed to fulfill the requirements of the Budget, including the increased teaching and recreational staffs, 49 million individuals would be needed. Thus we have a surplus in man power of roughly one million individuals. We can only conclude that there exists as little justification of ascribing the poverty prevailing in this country today to a lack of man power as of blaming it on insufficient natural resources and equipment.

Not only have we an adequate supply of labor to provide plenty for all, but a technology so proficient that short hours and long vacations can easily be made the rule. A forty hour

week or even less would seem to be feasible as soon as the shortage of modern houses had been made up and the more obsolete factories brought up to date.

Some difficulty might be experienced in the first years of released production due to shortages of skilled craftsmen. For example even today with industry operating at only some fraction of capacity, we hear occasionally that some particular plant has difficulty in obtaining the skilled mechanics it requires. This condition would become general if society should suddenly decide to provide the Budget. Though delays in production would certainly result, the problem is not serious. Modern technology requires fewer skilled craftsmen than the older machines. Manual skill, which requires a long apprenticeship, is gradually being replaced by machine operations. As a result we may expect in the future that industry will rely less on the skilled workman and more on the ingenuity of its engineers and designers. It seems doubly clear therefore that it is not lack of man power that causes poverty to prevail in this country today.



OUR POSSIBLE LIVING STANDARD

The completion of the National Survey revealed in considerable detail what standard of living the people of this country might enjoy if production were directed toward satisfying their needs and wants. It proved, for one thing, that the Budget of desirable living is definitely attainable — not a dream, an illusion or a theory unrelated to existing conditions. Certain of its needed items could be provided tomorrow. Others would take some time to produce. All could be had shortly if our natural resources, equipment, man power and knowledge were utilized to that end.

The following will give the reader a more detailed account:

FOOD To provide the American people with the Liberal Diet would require a quantity and quality of food worth, at 1929 prices, some 14% more than the food provided in that prosperous year. America had enough to eat in 1929. But we consumed more bread, potatoes, sugar and pork and less milk, meat, vegetables and fruit, than was desirable from the

point of view of health, pleasure and efficiency. Since the deficient items are more expensive than the sufficient items, the Liberal Diet would cost over three billion 1929 dollars more than the food that was actually consumed.

None of these shortages are necessary. The vegetable supply could be brought up to the Budget in one season. Fruits would take a little longer but equivalent products, berries or imported bananas, could temporarily be substituted. Poultry can be multiplied on very short notice. Steers and sheep would take somewhat longer, but the United States has plenty of grazing land and the increase of our herds and flocks is just a matter of time and care. The only serious shortage is that of milk. We need 77 billion pounds more than we produce. But this lack, which it would take several years to correct, is probably illusory. We have enough milk for the children of the nation right now. And it is doubtful whether a majority of the adults could be persuaded to drink as much milk as our dieticians recommend even if the necessary supply were made available.

Since the various shortages are not due to soil, climate or the inefficiency of our farmers but solely to the inability of most people to procure by purchase the foods they need and desire, the Survey concluded that the budget for food valued at $990 per year per family of four could be provided if production were released from the restrictions which today prevent most of our people from securing the foods they should have.

CLOTHING To provide the American people with the clothing budget would require a 65% increase of production. However all items are not equally deficient. In 1929, shoes, stockings and hats were turned out in quantities nearly equal to those budgeted in the Survey. On the other hand, less than half the needed suits, dresses and overcoats were supplied. As a result only one out of every six men in America was able to buy a new coat during that "prosperous" year.

Since 1929, production has dropped to but a fraction of its former rate. This condition is wholly unnecessary. Raw materials are available. The textile and garment workers, now partly disemployed, are anxious to return to work. The equipment, if operated at capacity, would provide easily the budgeted clothing, valued at $540 per year per family of four.

This figure may seem low to those accustomed to buying what they like. Actually it includes about all the clothing a family can comfortably wear. The prices put upon these items are the average prices of the various articles of 1929. However, since the quality of the standard products could be improved just as the quantity could be increased, the clothing budget that might be made available could well be of a quality which would command today some $1,000 per family. In any case it is certain that the budgeted clothing could be provided without any difficulty by the American plant if production were released.

HOUSING The existing need in America for new, fully equipped houses cannot be estimated exactly since opinions differ widely in regard to what may be considered as proper living quarters. To give an extreme opinion, some architects contend that the expensive Park Avenue apartments, with their inner courts and low ceilings are, despite their luxurious fittings, merely sublimated slums.

The Survey conservatively assumed that two-thirds of the existing residences were well below the standard made possible by modern design and technology and consequently estimated that between 15 and 20 million new living quarters were needed. This lack of decent modern living quarters is so great that it could not be made up immediately even though our production facilities were released and our millions of idle carpenters, steel men, plumbers, etc., were put to work. At the same time a start could be made toward rebuilding our residential quarters which would rapidly reduce the shortage.

Basing its estimate on the available materials, and the existing equipment and man power, the National Survey worked out a housing budget requiring the building of 1,500,000 new dwelling units a year. This figure is staggering when compared to our current building which amounted to some 429,000 dwelling units in 1929 and fell even lower to only 111,000 dwelling units in 1932. Though the proposed increase in building operations is tremendous, yet the National Survey housing budget can easily be fulfilled by utilizing existing facilities.

There is no scarcity of land. Acreage not required by agriculture or industry is physically available for the entire population of the United States. There is no lack of building materials. Stone, cement, sand, brick, tile, plaster, steel and various new composite materials can be made available in sufficient quantities to provide for the million and a half new homes which are budgeted as well as for the construction of industrial and social buildings at the generous 1929 rate. The same may be said for the various accessories, not only the traditional hardware, furniture and linen but also for modern labor saving devices such as refrigerators, vacuum cleaners, electric stoves, etc. Coal for the older homes and electricity, oil, and gas for the new homes can be provided. Architects, engineers and skilled and unskilled construction workers are today largely idle. That they could construct the budgeted million and a half new dwellings, city and country, apartment houses and single units, if put to work building houses, is beyond reasonable question. If mass production methods were introduced the budgeted rate of replacement could even be vastly speeded up.

Thus every person in the land could eventually enjoy the rooms he desired, in modern fully equipped houses, located in parks or in cities. Since modern transportation has reduced the time necessary to cover distances the city of the future would probably consist of: (a) skyscraper nuclei consisting of administrative and distributive offices as well as

recreational and educational assembly rooms; (b) an industrial center; and (c) a carefully planned residential garden suburb, the only limitation on the beauty of the setting being the genius of our architects and landscape gardeners and the peculiarities of the flora and the countryside.

To transform our housing needs into "market values" in order to include them in the Budget summary, required several operations. Existing owned homes had to be translated into "rent value" in order to put them on a yearly cost basis. Then the rent on rented homes had to be added in and the cost of housing supplies, not only current supplies such as heat, light, telephone service, etc., but also replacement costs, since furniture, linen and other permanent equipment have all to be replaced periodically. Finally the rent value of the new 1,500,000 homes and their full equipment had to be added in. The total came to 29,700 million dollars, about $950 a family; but unlike the other budgeted totals it would be increased each year by about two billion dollars as the rent value of 1,500,000 new well equipped dwelling units was added each year to the total and the rent of the supplanted slums and shacks was subtracted.

TRANSPORTATION All that is required to provide the American people with the transportation budget, is the operation of our automobile plants at capacity. Operating on a one shift basis, these could turn out six million new cars a year. More cars obviously could be produced by running two shifts, but if more cars than those budgeted were turned out, we would overcrowd our roads and exceed our gasoline supply. Of course more roads could be built, more petroleum "cracked" and our cities could be opened up to permit of greater traffic. But this possibility was not considered since the National Survey confined its estimate to the possibilities of the existing plant. Obviously roads, cities and refineries are part of the existing set-up.

Our public transportation facilities at present are more

than ample for all needs. The Survey budgeted a 50% increase in passenger service, which could be exceeded without any difficulty insofar as our physical limitations are concerned. Similarly by reconditioning stored locomotives or building new ones, our railroads and ships could carry roughly 50% more freight than any previous demand. However this possibility is of no particular bearing since the freight haulage of the country is likely to continue decreasing as modern technology encourages the decentralization of industry. By the use of electricity, power can be economically transported. Consequently new fabricating plants are likely to be built close to their supply sources, instead of concentrating them around the sources of power as was the custom in past decades. Thus savings would be made in the transportation of fuel and in the transportation of raw materials.

There is no question, therefore, but that the Survey's budgeted transportation, $467 per year per family of four, could be provided if physical factors were the only limitation on this service.

PERSONAL SUPPLIES To provide the American people with the budgeted personal supplies, writing materials, cigars, cigarettes, toilet accessories, etc., requires only a 25% increase in their production. From the point of view of production this increase could be attained at once, for ample materials and equipment exist. However, the $290 per year per family of four, which constitute the personal supply budget of the National Survey seems ultra conservative since no improvement in quality is included in the estimate and since many of the items, in fact nearly the entire list, could easily be made of better materials if their distribution did not depend so often on the factor of cheapness. Furthermore the budget could be vastly exceeded by increasing the production of novelties and other gadgets. In any case, the Survey made clear that the budgeted quantity of personal

supplies could easily be made available to the American people if a buying power sufficient to command an increased production were realized.

MEDICAL CARE The Survey's medical budget amounts to $165 per year per family of four ($42 per person). This would suffice to provide everyone with adequate medical care which could be supplied even without any increase in the existing medical staff and hospital facilities. The figure must be understood to be an average budget, since some families require much more medical care and others much less. Doctors and other health practitioners are at present in many cases unemployed or only half employed. If all of them were called upon, the American people would not lack health service.

EDUCATION The educational budget of $407 per year per family of four is high in comparison to the other estimates. The present staff of teachers could not fulfill it, nor are the existing school buildings capable of providing the budgeted service unless they were used more hours of the day than is now customary.

However, since many graduates of our colleges are capable of teaching and more than willing to teach, and since the shortage of buildings need only be temporary, the educational budget could be made a reality very quickly.

To fulfill the Budget, society would have to provide the additional teachers with food, clothing, shelter and the other accessories of living. However, the Survey indicates that these could easily be supplied to the whole population if production were released and the resulting wealth were distributed. Consequently, except for the temporary inconvenience of using school buildings more hours of the day than is now customary, no physical fact prevents our people from enjoying the generous schedule of education which is budgeted.

RECREATION To fulfill the budget of recreation requires only that leisure and spending power be better distributed. Today leisure is handed out in a lump to approximately a third of our population — the unemployed — who cannot make good use of it. Spending power is distributed in a fashion equally inequitable. Let us look at this problem from a point of view somewhat different than the usual. Do not the findings of the Survey show that by putting the idle to work producing the goods against which a vastly greater spending power could be issued, a satisfactory distribution of leisure as well as an ample supply of the world's goods and services could be guaranteed to every member of society?

On the equipment side, recreational facilities are more than ample. Our theatres will hold any foreseeable audience, and our athletic fields, countryside, etc., are capable of providing scope for play to the entire population.

There is no question but that the Survey's recreation budget — $393 per year per family of four — could be vastly exceeded by merely taking advantage of existing facilities.

MISCELLANEOUS This category, which lumps social and civil services, savings and taxes, is carried over unchanged from the 1929 production figures. This is not because these savings and services could not be vastly exceeded, but merely because the institutional changes necessary to effect these releases did not come within the province of the National Survey. Thus, though it is certain that charity, for example, would disappear if all our people were supplied with their quota of goods and services, such a possibility could not for obvious reasons be included in a statistical study. The same is true of savings. Renovating plant at even the 1929 rate (which is the rate assumed by the National Survey) would guarantee a material abundance in the future even greater than that possible today. Such an assurance would remove the function of private saving. Obviously savings bank accounts as well as life insurance policies would

no longer be necessary if old age as well as maturity was made secure. However, the Survey could not take this consideration into account.

If poverty and the fear of poverty were abolished, crime would be reduced by some great though incalculable percentage. As a result society could dispense with an army of civil servants. Again this economy lay beyond the scope of a statistical study.

Finally, there is an item of incalculable benefit which does not appear in the National Survey budget column. For lack of a more specific term we might describe it as economic security. If the provision of goods and services were limited only by physical factors such as drought and earthquake, the material insecurity which harasses so many today would cease to exist. For modern transportation is so effective that a crop failure in one area could be nullified by importing supplies from some other more fortunate region. This item again, was not included in the Budget although its equivalent, if bought from an Insurance Company, would alone cost the recipient at least $1,000 a year per family.

Translating into 1929 market prices the various goods and services with which the people of the United States should and *could* be provided by the existing resources, plant, knowledge and manpower, the National Survey obtained the following table:

ITEM	Per Family of 4.02 Persons
Food	$ 990
Wearing Apparel	540
Housing, Etc.	958
Transportation	467
Personal	290
Health	165
Education	407
Recreation	393
Miscellaneous	160
	$4,370

It would be interesting to compare this budget to the actual production of 1929. Yet such a direct comparison would give only a false impression. Conditions were much worse in that "prosperity" year than a comparison of goods required to goods produced would indicate. For one thing such a comparison would show that the production of many essential commodities fell far short of the nation's requirements. But it would not reveal the extraordinarily unequal manner in which the resulting shortages were distributed. In other words not only were insufficient goods produced but the shortages were so concentrated that a part of the population bore the full brunt of the scarcities. To suggest the real condition let me quote a few striking figures from "America's Capacity to Consume" published by Brooking's Institution.

In 1929, 21,546,000 families, about 78% of all families in the United States, had monetary incomes of less than $3,000; 16,354,000 families, some 59% of the total, had monetary incomes of less than $2,000; 11,653,000 families, about 42% of the total, had monetary incomes of less than $1,500; 2,102,000 families, about 7.6% of all families, had monetary incomes of less than $500; 120,000 families, some 0.437% of the total, had no monetary income whatever.

With these facts in mind the National Survey's figure of $4,370 takes on an added significance. It takes on even greater significance when we remember that nearly all of it represents an income which must be allowed every family in the country. Remember that the figure $4,370 is merely a way of representing so much food, clothing, doctor's hours, movie seats and so forth. And each of these goods and services if provided in desired quantities *must be given to everybody* — or they will not be consumed.

You can distribute dollars unevenly by giving one man two dollars, another two million. This is possible because

dollars are but tokens which may be entered in a book and forgotten until needed. *But you cannot maldistribute abundance.* There is just no way to do it. If the average need for milk is one quart a day, and you produce one quart for every individual in the land, the only way you can get your milk consumed is to give every individual in the land a right to all the milk he wants. This fact is not generally realized. Yet it is of crucial importance since it means that if the United States should choose to create abundance — which technically it can easily do — there would be no question in regard to its sharing. The dividing of it can be governed by one canon only: *give to each that which he needs.*

This conclusion is obvious if one considers such items as doctor's hours. The individual's need for doctor's hours varies greatly. If we provide all the doctor's hours that our population requires, we must, to take advantage of them, give each person a call on whatever doctor's hours he needs.

An idea of how the totals were computed may be gained from the following abridged tables:

FOODS	A	B	C	D
Meats	534.9	$186.67	586.2	$205.34
Lards-Fats	166.7	38.20	65.0	11.79
Poultry	56.7	30.32	77.6	41.24
Fish (fresh & cured)	73.8	12.50	56.0	9.48
Milk	2212.9	89.20	2743.1	153.45
Butter and Cheese	94.0	46.93	150.8	93.41
Flour	540.0	27.02	178.5	8.93
Breakfast foods	107.0	20.36	38.8	6.72
Bread & Biscuits	531.4	59.58	198.1	19.65
Veg. (fresh & canned)	1446.3	82.55	1744.5	98.52
Fruits (fresh & canned)	767.6	55.62	1451.1	97.69
Eggs	81.0	37.10	145.5	53.41
Sugar	658.0	25.38	259.4	17.79
Coffee Tea & Spices	45.5	24.84	45.5	24.84

(A) 1929 Consumption in pounds per family of 4.12 (*)
(B) 1929 Market value
(C) The National Survey's Budget per family of 4.02 (**)
(D) Theoretical market value

Note: Statistics show that the average family of 1929 (*) is larger than (**) the average family of 1934.

WEARING APPAREL	1929 Consumption of Garments Per Person	National Survey's Budget per Person
Men's Suits	0.50	1.50
Overcoat, Men	0.17	0.63
Hosiery	12.17 pr.	14.20
Shirts	3.00	6.80
Underwear	5.00	6.20
Shoes	3.30 pr.	3.90
Women's Coats	0.40	0.83
Dresses	3.60	4.90
Hosiery	10.87 pr.	12.50
Shoes	3.10 pr.	3.30
Hats	2.33	2.60

In view of the foregoing, it is clear that our practice of not producing wealth — of limiting the production of wealth to the buying power of the people — is the cause of poverty and all the other miseries which result from it. Now this practice is the result of an institution, of a social habit, or if you like, of an institutional lag. For our present institutions were once very useful. It is only because they have not been changed to keep pace with our transformed technology that they are no longer satisfactory. Evidently this institutional lag is very expensive.

The Survey disclosed the fact that the needs and reasonable wants of society could be satisfied by merely operating the existing plant by the customary labor force. Therefore the difference between what we might produce and what we do produce, is the cost to society of present institutions. Let us see what it amounts to.

To obtain this cost we require only simple arithmetic. We are compelled however to use our common denominator — the value of goods and services on the market in 1929 — in order to add and subtract and compare the various goods and services.

We produced in 1929, 96½ billion dollars worth of

goods and services including imputed rent on owned homes, the wholesale market value of food grown and eaten on farms, and illicit liquor. From this figure we must subtract an excess inventory (which was carried over into the next year) of goods and services worth a billion and a half. We must further subtract over one billion dollars which represents the value of goods exported less the value of goods imported. Making the two subtractions, we arrive at the figure of 94 billion dollars which represents roughly the market value of goods and services consumed by the American people in 1929, the year of maximum production and consumption.

But what would we have consumed if production had been directed to satisfying our needs and wants?

The Budget — goods and services worth 135 billion dollars — represent this figure. It is not a capacity estimate since the capacity operation of many productive plants such as flour mills is not included. It is an estimate of needs and wants based on the American standard or custom of living.

The National Survey discovered that we could have provided these goods and services worth 135 billion dollars. Of course if we should add the market value of security, beautiful surroundings, improved quality of goods and the other advantages of released production this figure would be markedly increased. However let us be conservative and follow the Survey which only included in its estimate such quantities as it could definitely calculate. Then we find that existing economic institutions cost the American people in 1929 the difference between 135 billion (representing desired goods and services which *could* have been produced) and 94 billion dollars (or goods and services which *were* actually produced and consumed). This amounts to 41 billion dollars — double the national debt of that year.

Continuing to make a similar calculation for subsequent years, by translating the dollars of each year into 1929 dollars, we obtain the following table.

STATEMENT OF LOSSES TO THE AMERICAN PEOPLE
(in Billions of 1929 Dollars)

	National Survey's Budget	Actual Production	Annual Loss to Consumer
1929	135	94	41
1930	137	86	51
1931	138	79	59
1932	139	69	70
1933	141	76	65
TOTAL LOSS TO CONSUMER (1929-1933)			286

Although we added each year to the estimate of possible production only an increase of less than 2 billion dollars, to represent the rent value of newly constructed residences, the cost of our obsolete institution reached the astounding sum of 286 billion dollars. By now this sum is far beyond the 300 billion dollar mark.

In all history no nation anywhere, any time, has ever been guilty of such a wild, senseless orgy of extravagance as have the American people during this period. For it is clear that running factories half time when they are designed to run full time, consigning men to breadlines when they are really begging for steady work, is a folly that would seem insane to an impartial observer. Of course no other nation ever had the technical equipment which would permit it to be so extravagant. But that is hardly an adequate excuse.

We have seen that the poverty of today in America is

not due to a lack of natural resources, or insufficient equipment, or inadequate labor force, or backward technology. On the contrary, if we merely utilized the existing equipment and customary working forces to satisfy our needs and wants we could easily provide at 1929 prices, goods and services worth 135 billion dollars, which would mean a minimum income per family of something over $4,000 per year.

This leads to only one conclusion: our poverty must be due to a flaw in our institutional set-up. Let us therefore examine it closely, for by so doing we may discover what the flaw is and perhaps in this manner realize also where the remedy lies.

THE OPEN MARKET SYSTEM

An Early Phase of Capitalism

Every one uses the word wealth without being very definite as to what it is. Sometimes it stands for an accumulation of money, sometimes of land or other productive property, sometimes of consumer goods, jewelry or valuable rugs and furniture. Such loose usage is satisfactory in general conversation. But for the purposes of analyzing an economic system, it is necessary to be more exact.

Today wealth may be divided into: physical or real wealth, consisting of goods which are desired for their *use* or *enjoyment value;* and symbolic wealth, consisting of gold, silver or paper tokens which are desired for their *exchange value.* Real wealth includes not only desired things, such as clothes, houses and land, but also farms, factories, mineral deposits, etc., which can be used to create desired goods or services. On the other hand, money, stocks and bonds are symbolic wealth, though here a distinction must be made between money, which is useful only for purposes of exchange, and bonds, stocks and other certificates of ownership

which are claims against certain specific items of real wealth and are not usually employed for exchange purposes.

Now it is clear that just as a pair of shoes is desired because shoes protect and cover the feet, so a dollar bill is desired because a dollar bill can be exchanged for something needed. The dollar bill in itself is of no use whatever. In other words the desirability of the dollar bill and all other forms of symbolic wealth lies in the quantity of real wealth which can be obtained for it. This exchange value of symbolic wealth is determined by what is known as price; for it is the "price" at which articles are bought and sold which determines the relation between real wealth and symbolic wealth.

But what are the forces which determine price? It is in the answer to this question that the key may be found to the inefficient functioning of our economic system.

In the past century and a half economists have maintained that society may best be served and that production and distribution may best be effected, by an economy in which prices are left free, free to range up and down in accordance with forces outside the control of any individual or organization. For example it may well be that a bushel of wheat at certain moments in certain localities will be exchanged for one dollar, while in other localities or in the same locality but at another time it will be sold for only eighty cents. Such a fluctuation in price, it was noted by economists, occurs when the interactions between the physical quantity of goods brought to market for sale, and the dollars or symbolic wealth brought to market for purchases, are not interfered with — in other words, when prices are not regulated or fixed by any governmental or private agency.

The belief of the economists in the efficiency and desirability of this system, known as the "open market system," is

due to the law which underlies such an operation. It is known as the law of supply and demand. When prices are free to adjust themselves to market forces, that is to say, to supply and demand, the interplay of the buyer's and the seller's actions results automatically in an equation. The value of the goods sold must equal, through the instrumentality of price, the money spent by the buyers.

Let me give an example. Suppose 100 sheep and 100 pieces of gold are brought to market. If all the sheep are exchanged for gold, and all the gold for sheep, the interplay of the actions of the buyers and the sellers will result in a price averaging one sheep for one piece of gold. However, if on the next day, 200 sheep and 100 pieces of gold are brought to market, the price of the sheep will drop, for there will now be less gold available per sheep than before. Under these circumstances, assuming all the sheep are sold, the average price will be two sheep for one piece of gold. Of course certain shepherds may refuse to sell at this lower price and prefer to take their sheep back to the hills, but assuming that they don't, this is the price which must necessarily result from the sale of all of the sheep for all of the pieces of gold available for their purchase.

This operation is automatic in the sense that it is unplanned. It provides, in the long run, that the *money on hand is always sufficient to buy whatever goods are for sale.* In this sense money or symbolic wealth always represents physical or true wealth, and mankind need not worry about adjusting the one to the other. This law of supply and demand is the fundamental trait of the open market system.

It is because of the automatic nature of this operation that most economists from Adam Smith down have expressed a preference for the open market system as against a planned "production for use" economy which is the alternative. It is

supposed to be fool proof. Whether it actually is fool proof is still a matter of argument, but we need not stop to consider the argument. It has no particular bearing on conditions today. For as a matter of fact the true open market system was never realized and the world of late has been drawing farther and farther away from it. It should be remembered that economic systems like other institutions are not fixed but are continually changing, sometimes slowly, sometimes at a rapid rate.

Let us consider why the open market system, despite its acceptance by generations of economists, has never become world wide.

There are various reasons why this system never became world wide and absolute. In the first place its free operation throughout the world would have meant a world wide leveling of prices. This would have resulted in a standard price for all labor, a uniform wage level throughout the world; for labor under the system is one of the commodities subject to market adjustment. However, since certain parts of the earth are inhabited by individuals accustomed to a scale of living which is lower than that of individuals in other parts of the earth, an international open market has been consistently opposed by labor in advanced countries. Workers in the United States receive an equivalent in goods and services worth from $1 to $15 a day as against $.04 or so a day in India. Naturally American wage workers do not want to live on or about the coolie level.

There are additional reasons why we are not living under this system today. If the open market were international, it would be expected that localities would provide only those commodities which they are best equipped to produce. But this conflicts with national needs for self-defense. The United States for instance has gone ahead

producing steel even though in the early days it would have been cheaper to import it from England. On the other hand England encourages the production of cotton in Egypt although it would have been cheaper for her to have continued importing her supply from the United States. Thus nationalists also oppose the international open market. Tariffs have been erected in order to foster native industries. These tariffs are, in essence, subsidies to industries not called into being by normal economic temptations. A tariff enables manufacturers to sell their products at home at a higher price than they could obtain in the world market, thus enabling them to compete with cheaper foreign imports. The beneficiaries of these subsidies, both enterprisers and workers, naturally oppose the reduction of their subsidies and advocate instead their increase. Since their strength grows in proportion as the tariff walls become higher, each nation tends to raise rather than to lower obstructive duties, thus increasingly handicapping foreign trade. It is this factor which more than any other has stood in the way of the realization of a world wide open market.

In fact only England ever took the vision seriously; and that, mainly because of her headstart in revolutionizing industry. So long as England led the world technologically it was to her advantage to practice free trade. If she could have persuaded other nations to do likewise, she might have developed a situation in which her commodities, fabricated by the energy derived from English coal, could have been exchanged for that part of the world's wealth which she desired. It happened however, that other nations also possessed coal, iron and the ability to imitate or invent. As a result even England has had to forego her traditional free trade policy and has recently put a tariff wall around many of her industries.

Besides the two obstacles just cited which have prevented the realization of a world wide open market system, there are other obstacles. These make it impossible to establish the system even within national borders where the labor standards are roughly uniform and where tariffs do not hinder the flow of goods.

The open market presupposes the freedom of all prices. And in this it conflicts with the fact that one price is not free to adjust itself in accordance with the interplay of supply and demand. This is the price of debt-interest. For interest, which represents the cost of carrying debt, is fixed in advance and is not allowed to vary with the passage of time or with a change in the conditions which originally determined its rate. Interest is a contractual relationship. This means that debt charges reckoned in dollars are constant. They can only be altered or cancelled by breaking the contract through bankruptcy. This constitutes a major obstacle to the free movement of prices on which the open market theory is based. For if the producer is unable to sell his goods in the market at the hoped-for price, he is supposed according to the theory of the open market to lower his price until it is low enough to tempt the buyers to purchase. But if one of the most important cost items is fixed, his ability to lower prices without going bankrupt is definitely limited.

For example, when the price of wheat is such that it requires the spending of more dollars than are available to buy wheat, the price of wheat should drop until the wheat can be sold, even though it might be necessary to drop the price to a nickel a bushel. But when wheat prices drop, the wheat farmer's mortgage, which is a contract to pay so many dollars a year, becomes unpayable.

If this occurs not only to the producers of wheat but also to the producers of clothes, tools, automobiles and every-

thing else, the system becomes temporarily unworkable and cannot function until bankruptcy ruins many of the enterprisers. In other words, the fact that open market prices are variable while debt or contractual prices are fixed, prevents the smooth operation of the system. In fact interest has become so important a cost item during the last century that today an increase of supply of real wealth such as wheat is often a calamity. Whenever goods become more plentiful, instead of feasting and rejoicing at the kindness of Providence as was the practice among primitive people who did not use credit or debt money, most of us, including enterprisers threatened with ruin and workers threatened with disemployment, bewail the hard times. The fact that society has merely become more wealthy is not realized, so accustomed are we to our institutions, or life ways. All we can see is that there exists a surplus of goods which cannot be sold at a profit. And we call it a depression.

This fault, if it were the only fault in the system, would not necessarily be insurmountable. It might be corrected by allowing practically every business man and farmer in the country to go bankrupt and then passing some law which would prevent the debt structure from being re-erected. Of course such a procedure would cause acute suffering and probably a destructive revolution. But even if these effects were evaded by some ingenious scheme of issuing fiat or paper money, even so the open market system wouldn't work as it should because of a still more fundamental flaw — a flaw which is probably more important than all the rest.

The open market system functions only in an economy of scarcity — an economy in which the productive efforts of the people cannot provide sufficient goods and services to insure the living standard to which they are accustomed by tradition. Up till a few years ago all economies were

economies of scarcity with the possible exception of certain societies on tropical islands where the wants of the inhabitants were low and adequately satisfied by the plentiful fruit, fish and sea shells of their bounteous environment. Obviously the open market system would not work at all on such islands where dinner hangs from every tree and earrings deck the shore. The reason that it would not work is that its operation depends on the selling of goods, and goods cannot be sold when they are to be had for the asking.

But are we still living in an economy of scarcity? Have we not reached a condition such as that on the island just described — except that our wants are on a much higher level? The answer is that we have. By using more fully our productive equipment, even the complicated desires of present day society could be satisfied. This was proved by the research of the National Survey.

Yet, though our economy could easily be transformed into an economy of abundance, we have not permitted this to happen. Instead we have chosen to maintain artificially an economy of scarcity. We have preferred, in other words, to keep capitalism — that is to say, "production for sale" — even though in so doing we have had to abolish its basic feature, that of the open market, and have had to restrict drastically the production of wealth. It is through our choice of this course that we have also prevented the realization of abundance and all that it would mean in the way of happiness for mankind.

CAPITALISM IN FLUX

As previously suggested, many economists of the past century and a half have believed in the superiority of the open market system over other possible ways of organizing the economic life of humanity. However, despite the general acceptance of its superiority, the system, for reasons already stated, has never been realized. In fact, the open market in which prices are free and production is not restricted has been maintained of late with increasing difficulty and for fewer and fewer commodities. This is easy to understand when one recalls that profits cannot be made when the supply of a commodity is greater than the demand — a condition which modern technology fosters.

The early theorists of course recognized the fact that the open market system could only operate when goods were scarce. But they also assumed that human wants are infinite and that they consequently can never be fully satisfied. In fact they took it for granted that an undersupply of goods in relation to society's desire for goods would always exist. If this were the case the efficiency of our technology would

be beside the point. No matter how much we produced we would still be unsatisfied. For if existing wants were satisfied, new wants could be developed.

It is a plausible theory, and it works out all right with "abundance" economies such as are found in the South Seas. To give an example: traders are disembarked who persuade the garlanded natives that pants are an essential part of a self respecting person's attire. Pants however are scarce on the island. Hence the natives must pick, crate, and ship coconuts in order to obtain money with which to buy pants. Scarcity is established and the open market system successfully introduced. A similar procedure is followed in industrially advanced countries through the medium of advertising. Instead of traders, trained writers and artists are employed to titillate appetites for goods of every kind and description. As a result wants have increased with every decade. But what is frequently overlooked and what the academic economists would find difficult to answer is that our capacity to produce goods in the past hundred years has increased faster than our ability to create new wants among those privileged to satisfy their wants. For it must be realized that the consuming power of the largest part of society today does not rise proportionately with increased productivity. Of course this difficulty existed even in a primitive society but in a much simpler and less intense form. To illustrate:

Let us suppose that the price of one piece of gold for one sheep is adequate to provide shepherds with that life standard to which they are accustomed. But the pastures during a certain year are particularly green and the flocks therefore double. The shepherds are fortunate and bring 200 instead of 100 sheep to the village market. The amount of money in the village available for the purchase of sheep

is, however, the same as before. If the shepherds should sell two sheep for one piece of gold, they would receive the same 100 gold pieces that they had received the previous year for 100 sheep. This would satisfy their normal wants even though they might well feel bitter because of their inability to translate their successful shepherding into personal rewards. But suppose the village could not use 200 sheep and the villagers therefore refused to buy more than 100 sheep. As a result the price might well drop below two sheep for one piece of gold. In any case the shepherds would be compelled to return to their pastures with one hundred of the sheep they had wished to dispose of and perhaps with less than their 100 pieces of gold. Because of the increase of their flocks, they would suffer in the future from a condition of chronic overproduction, an annual production of sheep greater than they could dispose of, unless disease should intervene and reduce the flocks to their former dimensions. As a result, if we assume the village and pasture to include the whole universe, the price of sheep would permanently recede in the market in comparison with other prices, and the shepherds' reduced income would thereafter prevent them from living in their accustomed manner.

So far as the contemporary industrialized world is concerned this example though valid, is much oversimplified. Another factor is involved which increases the difficulty. In the simple society suggested above all men are enterprisers. Consequently every man presumably has something to sell and thereby something with which to obtain money with which in turn to buy goods. But under the capitalist system, a large portion of society has nothing to sell except its own labor. Now labor, it should be remembered, is treated like any other commodity. When labor is scarce it brings a relatively high price on the market; when it is plentiful, a low

price. Therefore when glut — a short word for oversupply — occurs in any commodity, labor is thrown on the market. This causes an oversupply of labor and tends to force the price of labor down, just as the oversupply of sheep forced down the price of sheep. But workmen not only sell labor but also buy goods. As a result when their wages are forced down, they are not able to buy as much goods as formerly and the condition of glut is intensified. Greater glut means even less need for labor and this in turn means increased disemployment.

The logical outcome of such a causal sequence is a people starving in the midst of plenty. But we are not a logical people. We don't, at least of late, let them starve. We tell them instead to fall in line and beg for their bread.

Of course even the early economists recognized the possibility of glut. Their answer to the problem of the shepherds faced with an oversupply of sheep was quite simple. It amounted to this — that a number of shepherds must desert their calling and discover some other way of making a living.

In the actual world such a situation is always arising. It occurred on a large scale in England after the Napoleonic Wars. A simpler example was the fate of America's harness makers. As the automobile gradually superseded the horse, many enterprisers and workers dealing with horses and carriages were compelled to find other pursuits. Such a change of occupation is practical so long as new needs are around the corner waiting to be satisfied. To put it more exactly, man can be diverted from the production of plentiful commodities (P) to the production of scarce commodities (S) so long as the number of commodities which *can* be produced in the *requisite quantities* is a small *percentage of the total production.* In other words, so long as "P" remains

a small proportion of "P + S" so that the workers released from "P" can be reemployed in "S." Today the use of power and automatic machinery has reduced "S" (the number of commodities that cannot be supplied in the requisite quantities) to those things which for one reason or another are still made largely by hand. But perhaps all of this will become clearer if we suggest how this difficulty which has been increasing with each decade has been taken care of by society.

Though technology has never been static, it has advanced through most of history at a snail's pace, with long periods of stagnation and centuries of retrogression in between. But several hundred years ago technology started developing at an accelerated rate. This rate is not only continuous but is continuously increasing. As a result with each succeeding year society has acquired additional man hours and materials. To give one of the most modest examples: it used to take the labor of 4 farmers to feed themselves and 1 man in the city. Today 1 man on the farm provides enough to feed not only his family but some 20 city people. This example is modest because technology has done many times as much to raise the productivity of the industrial worker. In any case it is indisputable that modern technology has made it possible for each worker today to produce many times as much as did his forbears, thus releasing an increase of both wealth and leisure for our use and enjoyment. But what has happened to these increases? Have they been applied to making life richer and happier? Let us consider what has been done with them.

A fraction of the increase has gone to improve the living standard of the industrial workers. This improvement in their living standard is real and undeniable, although it does not extend to all classes of labor. This improvement has

been partly balanced, however, by a gradual reduction in the size of the entrepreneurial classes. America has steadily changed from a society of farmers and shopkeepers to a society of salary and wage workers, with a few powerful families directing the fortunes of great corporate empires. Although the employed workers are better off than during any period of history, it does not seem that they are as well off as their forebears who were independent enterprisers — shopkeepers, farmers, blacksmiths, etc. But these are imponderable values and cannot be measured or demonstrated. We do know this, however. Though the average real wage has increased, the average per capita income has not. This indicates that though industrial workers have benefited by the advance of technology, other sections of society — farmers, small shopkeepers, etc. — have lost not merely in numbers but also in wealth. Translating the per capita income of the population into dollars of constant purchasing power (1913), we find that the per capita income was $282 in 1932 as against $372 in 1860. And it may be that the peak income, $432 in 1927, cannot be regained under the present system. In any case, the nearly four-fold increase in productivity per worker in the past 70 years has not been translated into an equivalent improvement in living standards for society as a whole.

Another fraction of the increase seems to have gone into what Thorstein Veblen used to call "conspicuous waste"— a diversion of man hours from productive activities to catering to the fancies of the rich. However, since property has become increasingly concentrated, a smaller percentage of the people are well to do than was the case fifty years ago. Therefore it is doubtful if this item, despite its conspicuousness, takes up much of the slack between former and present productivity.

Another fraction of our increased productivity has gone into commercial waste, the overelaboration of distributive agencies, excessive competition, pernicious advertising. But this factor again is much exaggerated. Perhaps a million men or thereabouts are uselessly diverted thereby from production. But this is more than compensated by the fact that many millions have been released by the substitution of power for muscular effort. And the materials used in commercial waste are inconsiderable, consisting largely of paper and office equipment.

There remains another outlet into which the wealth set free by advancing technology has been diverted. For lack of a better name we may call it "imperial expansion." This channel appears to have taken up the bulk of our increased productivity. Even before the industrial revolution was under way, Spain and Portugal, France and England diverted men and materials from domestic production to foreign conquest. After the conquests came settlement and colonial construction. At first this did not necessarily mean a voiding of wealth. More wealth was taken from conquered territories in the early days of imperialism than was brought to them. However, owing to our newly won ability to produce at home more than can be distributed at home under our system, colonies have been used of late as dump heaps for surplus wealth. In the language of finance this is called "foreign investment."

Consequently after the five continents had been colonized and expansion had passed its peak, the quasi open market system was imperilled by a lack of outlets for the commodities which an advancing technology could turn out in ever increasing quantities. At this point competitive arming, which assumed an ever increasing importance as a consumer of materials and man hours, relieved the strain

slightly — but it proved insufficient. As a last resource war was declared and the inhabitants of America — those who were spared from the trenches — had their first taste of what modern technology could provide in the way of better living conditions. Conditions were improved because millions of men were withdrawn from the labor market and were set to work destroying not merely other men but also the commodities which the workers left at home were producing. This resulted in a labor shortage. Under the open market system shortages mean high prices; in this case, higher pay for those workers who remainced at home. In consequence masses of people in the United States actually obtained possession of silk shirts and other appurtenances formerly the exclusive privilege of the owners of property.

After the World War and the arrest of this artificially induced consumption of goods, the recurring crises were postponed in this country by the renewal of foreign investment on an unprecedented scale. The United States not only poured wealth — raw materials, equipment and consumer goods — into foreign territories, but also sent to the same destination symbolic wealth, or money, in order that foreign nations might pay for the real wealth they were getting from us. Our country persisted in this extraordinary performance even after it had become evident that we would never and could never accept wealth in return, since domestic buying power could not command even the total of domestic production. Nor had we the excuse for these shipments abroad of developing colonies — which cater at least to national pride — but sent both kinds of wealth to alien peoples knowing full well that they would compete with our enterprisers on the world markets.

During this post-war period still another outlet was developed for releasing our product capacity. Man hours

and materials were turned into capital goods — new domestic machines, buildings and factories. Also, an ingenious device, known as installment buying, was worked out for selling goods on credit — a device which temporarily had the same stimulating effect on business as the high wages of war days.

Of these factors the capital goods expansion — the construction of new factories and buildings — was the most important. It occupied directly approximately one-third of our workers without counting the farmers, miners and others whom it occupied indirectly by creating a market for their produce. But in 1929 our bankers called a halt on the credit expansion which made possible the capital goods activities. No doubt they were moved by a praiseworthy feeling of caution, since even the financial wizards of the day were beginning to see that selling on credit has a limit if repayment is insisted upon. And of course their perception was assisted by the defaulting of foreign loans here and there. In any case credit expansion was arrested in 1929, and this stoppage brought in its train the orgy of non-production now harassing our people.

As we have seen the accelerated advance of technology in the past century resulted in an increase of productivity per man, resulting in a release of man hours which could have been translated into desired goods and services or general welfare. Instead of taking this course, society has utilized the increased productivity to raise slightly the standard of living, to indulge in some "conspicuous" and commercial waste, and to colonize and settle the technologically undeveloped parts of the earth. When these latter outlets were approaching exhaustion, the industrial nations postponed facing the situation by engaging in destructive warfare and a further capital goods expansion on a debt basis. In time this device failed them too, precipitating a world-wide

orgy of non-production from which a few nations are today seeking release by the perilous stratagem of competitive arming and military aggression.

This situation is not entirely unprecedented. Depressions consisting of non-production and the arrest of work, have happened before during the capitalist era. But the intensity of the present crisis was heightened by its artificial postponement for some fifteen years. Or, we can hold with some reason that the postponement has been over a hundred years long. If we do, we may hold that the logical end of the capitalist era occurred when it first became possible to provide an improved standard of living for the population, and the possibility was not realized.

Such a situation could not have arisen in a simple society such as that of the shepherds and their sheep. In such a society, the providing of the several commodities in the quantities desired by the members of that society would long ago have exploded the open market. Production for sale at a profit would quickly have been seen to be impossible, and barter at a fixed or customary price would quickly have been established so that each might trade his surplus for such a share of the other producer's surplus as he needed. A condition of plenty for all would have been established and production for sale would have been diverted into new channels, or if you like, into the creation and satisfaction of new wants.

But this simple answer is not accepted by our civilization, although our situation is very similar to the one sketched above. It is not accepted because of complicating factors which not only prevent society from realizing that it has solved the problem of producing basic goods in the desired quantities, but also prevent society from producing and distributing the plenty potentially available. These complicating

factors are the debt system and the labor system described above.

We don't, like the shepherd and the wheat grower in a simple society, produce all we can, bring the surplus to market, and take what we can get. If we did, this country would long since have been smothered in wealth of all kinds. Just imagine the houses that would have been built if our house builders had been allowed to build all the houses they could have built, year after year. Imagine the condition of our roads if all the automobile concerns had been running at capacity these last twenty years. Imagine the congestion in our closets if our shoemakers had operated their machines at their practical capacity. The picture is fantastic; but it is merely a picture, for the situation was not allowed to develop. Instead, our industrialists gradually transformed the open-market-free-price-system which threatened their solvency into a different phase of capitalism in which "production for sale" is maintained but the free movement of prices is abolished. We may call this system the "administered price system." Under this system the producers strive to maintain a profitable price by holding production down to the existing buying power of the nation. But what does restricted production mean when the needs of our people are not satisfied? One thing and one thing only! *Poverty artificially enforced.*

Today in America in spite of potential plenty we are continuing to live under a system in which production is restricted and poverty is maintained even while acute want harasses the land. Such is the situation which confronts us today. It must be clear that we cannot hope to bring plenty and security to a people by *not* producing the goods which are needed for a decent life.

THE ADMINISTERED PRICE SYSTEM

A Late Phase of Capitalism

American producers restrict production. They do not create all the wealth they can, or even all the wealth the people want. What they create is just that amount of wealth which they think they can sell at a profit.

This procedure seems reasonable because we are used to it. But in reality it is not reasonable, for how can a restriction on the production of needed wealth be reasonable?

In the last one hundred and fifty years the main obstacle to human welfare has been overcome. Poverty, and the malnutrition, filth, crime and disease which it causes, are no longer part of the nature of things. We have learned how to produce enough to satisfy the needs and wants of all the people. We have not yet learned to avail ourselves of this opportunity. But could not this be remedied? Could we not recover full uncontrolled production; or, if full production, as the National Survey has shown, is no longer desirable since we are now equipped to produce more than enough for certain of our needs, could we not devise a means of producing what our people require for a sound, healthy

life? Could we not recover "Production for Use" while still retaining all the advantages of modern technology with its promise of abundance?

This question can be answered emphatically with a "yes." Anyone willing to examine carefully the workings of our present system and so discover the reason why it restricts the production of the things we need, can accept no other answer.

Modern technology makes it possible to produce great quantities of most commodities with comparatively few man hours. But owing to the fact that our institution of credit or debt is a contractual relationship, certain charges or cost items are fixed so that we produce not only to sell, but to sell above a certain minimum price. Suppose the cost of fabricating a certain motor car is $500. Then the company which produces this car will build all the cars it can, so long as it continues to obtain $500 or more. If it can find only 50,000 customers who will pay this price or better, obviously it must limit its production to 50,000 cars. For if it produced 100,000 such cars, it would not remain in business very long. But the production of cars, in an open market system, cannot be limited because this would amount merely to turning the business over to a competitor. As a result industrial producers have been finding it more and more difficult to produce great quantities of goods in competition with each other, and at the same time to obtain profitable prices for their products. Faced with this situation, they cast around for a solution and eventually found it. They learned that they could often maintain a profitable price level by combining their forces and restricting production to the number of goods for which customers could be found. In other words they did away with price competition and thereby altered the character of our economic system.

Of course not all producers found this out at once or were able to agree on a policy of restricted production. Until a short time ago the open market system still prevailed among our farming population. In fact even today wheat, cotton, eggs, butter and all the other farm commodities are offered and bid for each day on the markets. But since the prices obtained have been, by and large, somewhat beneath the cost of production, many farmers were bankrupted and so lost their farms. It is in an effort to remedy this situation that the various measures including payments to farmers for not producing wealth were introduced by our government. For we have entered an era in which the open market system has definitely given way to a new order — an order which frankly accepts the necessity of restricting production if a profitable price is to be realized. But what does this change mean to you and me and to society in general?

As we have seen, money or symbolic wealth, under a true open market system represents real wealth. When prices are free the coins of the village are always sufficient to procure the sheep which the shepherds have for sale. The only thing that varies is the price which the shepherds get for their sheep. They must take a low price for their sheep, if they cannot get a high one. That is all there is to it. Under these conditions, it is the ability to provide goods and services and not the money in people's pockets which determines the quantity of goods produced, thereby setting the standard of life. Consequently when prices are free, buying power is always adequate to command a desirable (optimum) production of wealth.

But in a situation such as the one which we have been considering, in which prices are administered — that is, set by agreement — buying power need not and does not command a desirable production of wealth. On the contrary

buying power may command production at only half speed or even at quarter speed, and money need no longer represent real wealth. Or, to put it exactly, the money income of the country need not represent the goods which our productive facilities *could* provide. And it habitually does not. Instead of productive ability governing buying power, as is the case when prices are free, it is *buying power that comes to govern the rate of production.* Instead of the real or physical world of goods and services setting our life standard, the institutional world of wages and profits, interest and rent, establishes the manner in which we shall live. Of course this is not common sense. But common sense or not, this is exactly the practice contemporary civilized man has let himself in for — in America and elsewhere.

Thus the question arises: with prices held on or about present levels as they at present are, how much can our producers sell? The answer is in our possession. They can sell just that amount of goods which the American people can buy. But how much can the American people buy? This question, too, can be answered. They can buy goods and services up to the purchasing power of their aggregate, that is to say, their combined, money income — neither more nor less. Obviously one year they may spend a little less by putting currency under the bed, and another year they may spend a little more by taking it out again, but these amounts are trifling in America and consequently do not materially affect the situation.

What then is the aggregate money income of the American people? The national income, in terms of money paid out, is given in the following table which represents the official accounting of the United States Department of Commerce, released in November, 1935.

NATIONAL INCOME PAID OUT BY TYPES OF PAYMENT
(MILLIONS OF DOLLARS)

Item	1929	1930	1931	1932	1933	1934
Total income paid out	78,632	72,932	61,704	48,362	44,940	50,189
Total labor income	51,487	47,198	39,758	30,920	29,420	33,528
Salaries (selected industries)	5,664	5,548	4,606	3,387	3,048	3,250
Wages (selected industries)	17,197	14,251	10,608	7,017	7,189	8,944
Salaries and wages (all other industries)	27,690	26,409	23,461	19,417	17,591	19,046
Work relief wages					619	1,389
Other labor income	937	990	1,083	1,099	973	899
Total dividends and interest	11,218	11,302	9,764	7,980	6,969	7,227
Dividends	5,964	5,795	4,312	2,754	2,208	2,549
Interest	5,104	5,305	5,169	4,975	4,592	4,584
Net rents and royalties	3,424	2,766	2,096	1,470	1,245	1,382
Entrepreneurial withdrawals	12,503	11,666	10,086	7,992	7,306	8,052

In order to make this table clearer, let us roughly summarize the three basic divisions of the national income.

	In Millions of Dollars	
	1929	1934
Property Income (interest and rent)	8,528	5,966
Profit (entrepreneurial withdrawals and dividends)	18,467	10,601
Wages (wages and salaries)	51,407	33,528

As we have just seen, there can be no appreciable increase in production under the existing administered price system unless there is first an increase in the buying power of the people — that is to say, an increase in either property income, in profit or in wages. Let us see if we may expect an increase in one or all of these categories.

The first of these, *property income*, represents that part of the national income depending on ownership which is set by contract. This distinguishes it from profit which also depends upon ownership but is not fixed by contract. Property income is further distinguished from profit in that it has little bearing on the ability of the American people to

consume goods. For property income is not, as it is often assumed, a primary division of society's income. For example, if the owner of a house raises the rent $100, the total income of the nation is increased by $100. But this increase is only apparent. For the tenant of the house will have experienced a $100 increase in the cost of his living. He will have $100 less than he had before while the owner will have $100 more. The same is true of interest — one man pays it, another receives it. Thus it can be seen that property income affects only the distribution of income among the members of the nation, and not the income of the nation as a whole.

The second division, *profit*, represents that share of the national income deriving from ownership which is not set by contract. It is usually thought of as the share of production which goes to the enterpriser. For example, if a shoe factory turns out 100 shoes a day, and the cost of labor, capital and materials total 75 shoes a day, the owner, or the owner-enterpriser will receive as his share 25 shoes a day, or the equivalent of 25 shoes in money, provided he can sell them on the market at the price demanded. Such an arrangement is practical so long as the market can absorb the shoes. But if the buying power of the people should be exhausted, the owner would not be able to obtain a profitable price for his product and his profit as a result would disappear.

But the owner naturally desires a profit; in fact he must get a profit, or at the least come out even, since otherwise he will go bankrupt and cease producing altogether. Consequently, when he has control over production, which is largely the case today, the owner prefers to run his factory at a lower rate rather than produce more goods than he can dispose of at a profit. Such a procedure, however, brings the

enterpriser to another pitfall. Since it takes fewer men to run a factory at half speed than at full speed, and unemployed men do not get paid or, at any rate, do not get paid as much as when they are employed, the purchasing power of the people is further decreased. Consequently the owner once more has difficulty in disposing of his product at a profit and must again reduce his rate of operation. If this sequence were carried to its logical conclusion, the present system of maintaining prices and curtailing production when buying power is lacking would result eventually in a complete stoppage of work: in other words, a complete stoppage of wealth creation.

There is a reason why this disastrous climax has not been reached. Under the present system banks have the power to create money. A banker may issue a credit, which is interchangeable for money. He may issue this credit against whatever he considers adequate security. And though this credit or debt pays interest and theoretically must be repaid someday, it is good nevertheless as buying power until it is paid back. If enough of it is issued the lack of buying power which compels factories to close can be temporarily made up. Thus in 1915 to 1918 this country experienced what is known as "prosperity" because the bankers created vast sums of money which they loaned to the Allies, to our enterprisers at home, and in later years to the United States government, each of whom proceeded to spend it. The same procedure was followed, though on a different basis, in 1933, '34, and '35. During these years the bankers created vast sums of money against the security of United States bonds and gave this money to the government in exchange for its bonds. The government in turn gave it back to failing enterprisers, even to failing banks, and to the disemployed and thus replenished

the buying power of the country which had been falling steadily for several years.

It is obvious that this is an extraordinary procedure. But extraordinary as it is, it would perhaps be justified if by this means the people of the United States would be given the opportunity to enjoy the standard of living to which they are entitled by the present state of technology.

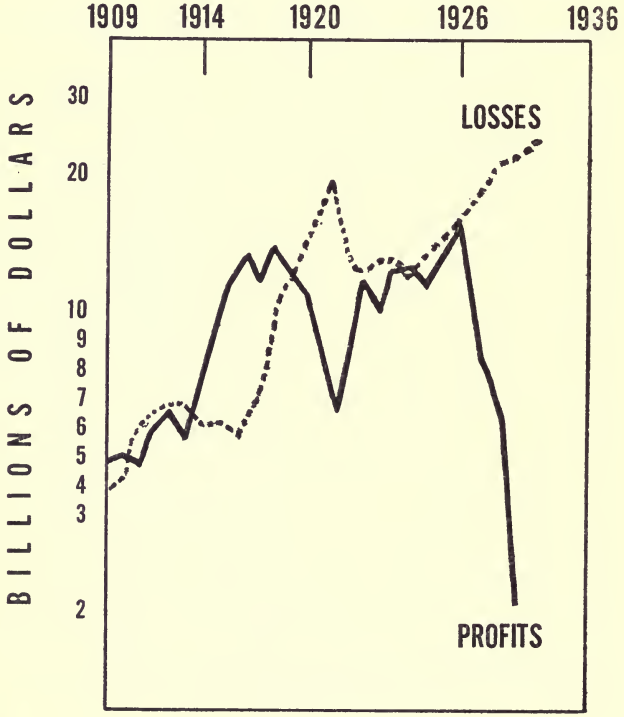
However it must be remembered that banker's credit is nothing more nor less than debt, and debt is not only burdensome to carry but represents an obligation which must be repaid at some future date. In practice repayment is often evaded, but this possibility must not be apparent at the time when the loan is made or the bankers will not lend the money. And it takes the hysteria of war time or the dictatorial censorship of a Fascist state to obscure the fact that repayment, when loans are made on a vast scale, is, to say the least, uncertain.

It is by the issuance of credit or debt money that reductions in national income are counterbalanced. When factories are being closed down and men are being laid off, the administered price system would lose speed until it came to a stop if debts were not incurred. And unless debts are contracted faster than debts are paid off, profits cannot be expected to increase. In fact if prices are not allowed to fall, as is the practice today, and if a reduction of buying power is translated into a lower rate of operation, profits cannot even be maintained. This is due to the fact that profit depends not only upon the difference between the price and the cost of each item but also upon the number of items produced. If this number diminishes, overhead, which is to a large extent fixed, eats up the gain from the profit per item. By and large, profits can therefore not be expected to increase sufficiently to make up the gap between the existing buying

power and the buying power needed to command a desirable production of goods. In fact there is some question whether there would be anything left if we subtracted all losses from all profits; whether, in other words, a net profit is possible at all except when the debt structure is increasing.

The following chart, from Robert Doane's "Measurement of American Wealth" illustrates this point.

According to this diagram, profits and losses in so-called prosperous periods pretty well balance each other, and profits



TWENTY-FOUR YEARS of PROFITS and LOSSES

COURTESY HARPER & BROS.

exceed losses only in times of inflation such as during the War. Obviously during times of deflation when debts are being paid faster than they are being incurred, losses are far greater than profits.

It would seem that such a condition is to be expected. If prices are fixed and if no new money is being introduced in the system or old money taken out, profits must equal losses or the system wouldn't work. In former times this was dimly realized. When people traded, the advantage was seen to derive from trading something you didn't want for something you did want. Obviously both parties gained. But "production for sale" is something else again. Each producer expects to get his costs back and something more. This of course cannot be done without somebody losing as much as somebody else is gaining.

The reason this extraordinary condition which makes the capitalist system part fake, part delusion, is not generally realized is that profits, which are made even in the worst times by a few of our more powerful monopolists and semi-monopolistic corporations, are tabulated, advertised and publicized, while losses are left in obscurity. A few thousand enterprises make profits, enabling a few million shareholders to share substantially in these profits. Meanwhile millions of farmers, small enterprisers and less powerful industrialists operate at a loss. Gradually they lose their "equities" whether it be land, machinery, or a stock of goods. But no record is kept of the gradual but steady shrinking of their property, no record outside of the census. There we may read that America, formerly a land in which 75% of its citizens were free enterprisers — farmers, blacksmiths, shopkeepers — has gradually become a nation in which 80% of its citizens work for wages.

Although the foregoing reasons would in themselves be

sufficient to explain why future profits are more likely to decrease than to increase, there is another aspect of this situation which is even more fundamental. Most profits depend upon mass buying power. But with the population divided as it is today — four out of five men working for wages or living on the dole — profits cannot be considered separately from wages. Thus our inquiry, in the final analysis comes down to the consideration of the third and greatest division of the national income — wages, which amounted in 1929 to 52 billion dollars out of a total money income of 78 billion.

Can wages and salaries, under the existing administered price system, be expected to increase to a point which would permit producers to run our plant at a rate sufficient to supply us with the things we need? The chances are against us. Wages can be increased in the following ways only: either by raising the individual's pay, by employing more workers, or both.

Let us consider the first alternative. Is a general wage raise likely? Since every enterpriser by the rules of the game must compete with every other enterpriser to reduce costs, he is forced to buy labor on the market at the lowest possible price. But the cost of labor is the only cost item which can be effectively reduced. Interest is fixed by contract. The cost of materials, again, depends on the cost of the labor that prepared the materials. Consequently in the last analysis the struggle of enterprisers each to produce at a lower cost than his rivals, must fall on the back of the worker. The penalty for paying labor more than a competitor does, and thereby producing at a higher unit cost, is bankruptcy sooner or later. Thus no matter how humanitarian an employer may be, under the capitalist system he is compelled to pay as little as possible to his workers. We may therefore assume that when circumstances are such that labor

is not scarce, wages will approach the subsistence level — the level needed to keep the worker in sufficient health to maintain his efficiency and the future efficiency of his children. In practice, however, this system works somewhat differently, although as we shall later see not differently enough to raise the general wage level to the point where it would command the budget which modern technology could provide.

Certain sections of employed labor today receive pay that permits of a life that would have been considered luxurious in other epochs: movies, meat several times a week, ample sugar, salt, tea, and coffee, a radio and sometimes a car. The reasons are many. The western frontier is responsible for one of them. In a capitalist society, enterprises rise and fall with the expansion and contraction of debt. When bankers are generous in issuing loans, new enterprises are freely undertaken. On the other hand when this credit money is being called in and paid off, not only are new enterprises not undertaken, but many existing enterprises are forced to the wall and closed up. In the past century during such periods of deflation many of the more energetic of the disemployed workers went West. Consequently when business picked up again a shortage of labor was felt. Employers had to bid for men. The wage level rose. When the ebb tide of business set in again, these gains were partly retained in such branches of labor that were organized. For example, the wages of carpenters, locomotive engineers, painters, etc. were often maintained and are being largely maintained at the moment despite the thousands of unemployed willing to take the jobs of those still employed.

All of this was all right, or at least it was endurable, so long as the West was a place where workers and ruined enterprisers could go when life became too desperate. Since this possibility no longer exists (for the West today has no free

land and unemployment exists in the cities and misery in the country) the problem for workers is one of struggling to maintain the existing wage level even while men are waiting to step into their places at any price. Thus we may conclude that even if organized labor should become stronger no appreciable increase in the wage level is to be expected. Even if labor repels the forces which tend, when labor is in oversupply, to force wages down, society would not be nearer a satisfactory economy.

Of late the government has attempted to remedy the situation by assisting labor in its efforts to organize and to bargain collectively. In this the government has not been very successful due to the opposition of business. But even if it had succeeded, with prices administered by the producers, a wage raise in dollars would mean little. For such an increase in wages (to the producer an increase in cost) would be translated into an increase in price. And the total effect would be zero. A worker would get more for each hour of labor. But he would have to pay more for the things he had to buy. In all probability he would lose more than he had gained. But even should labor regain its 1929 wage level; should the 11 million disemployed get back their jobs at their old pay; and should profits and property income recover their former levels, even then we would receive the income only of 1929, some 42 billion dollars short of the 135 billion dollars required to purchase the goods and services budgetted by the National Survey.

There exists another alternative, another way in which the buying power of labor could be raised. The sum of all wages can be increased by employing more men to do the same work. This however would be a reversal of the trend of recent centuries. For some time society has been employing fewer and fewer workers per total of the population.

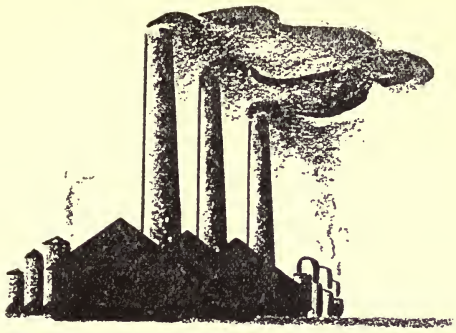
This fact has been obscured in the statistical summaries because working enterprisers (farmers, shopkeepers, etc.) have been steadily forced or tempted out of their enterprises to accept wage jobs. Thus the proportion of wage workers to population has been rising even while the proportion of working producers to population has been going down. Each year we require fewer men to produce the same quantity of goods — a fact which is clearly indicated by the following table adapted by the National Survey from the 1933 Statistical Abstract of the United States.

Value of products per worker in the Manufacturing Industries in 1929 dollars	1869	$2,658
	1914	6,172
	1919	7,153
	1921	6,900
	1923	7,484
	1925	7,876
	1927	7,862
	1929	7,969
	1931	7,565
	1932	8,859

It is evident that the "value" contributed by the labor of man has risen steadily in the last 60 years, in times of prosperity as well as in times of depression. It must continue to increase unless we outlaw technological improvements and deliberately replace new machinery with machinery which is not any more efficient than the old, and cease making inventions. If such a course were followed large sections of industry would have to be closed down — the machine tool and allied industries, for example, which are largely engaged in developing and installing new and better equipment. Such a stoppage would cause a financial collapse and therefore cannot be instituted under the present system.

In sum, since neither property income nor profits can be expected to rise appreciably, since the wage level can at best hold its own, and since the sum total of wages will continue decreasing as men are released by technological improvements, it would seem as if the gap between what society enjoys in the way of goods and services and what society might enjoy by fully using its man-power and equipment must increase, if the present economic order is persisted in.

But there is one further possibility to be considered. Capitalism has saved itself in the past when faced by similar though less acute conditions by credit or debt expansion. Our banks have acquired the right to create money. If you can convince a banker that you are a good risk, or if you can deposit with him bonds, stocks or other certificates which he considers good security, he may lend you money by writing out a check which has nothing behind it except the financial standing of the bank. In other words, this check represents new or created money. By this method your buying power and the buying power of society may be increased. Such a practice, however, obscures the direct relationship between supply and demand. When the bankers are being amiable and are issuing many loans, the stultification of our economic system is concealed. On the other hand when the bankers call in the loans, the unsoundness of our economy is laid bare. Thus, under our system, those times during which we go into debt at a fast rate are known as prosperity, while those times during which we pay off debts are known as depressions. It's an odd system. Our economy rewards reckless borrowing with real wealth (the production of goods and services) and penalizes the honest payment of debts with dire destitution (the idleness of men, factories and fields). Conscious ingenuity could hardly have devised so perverse a system.

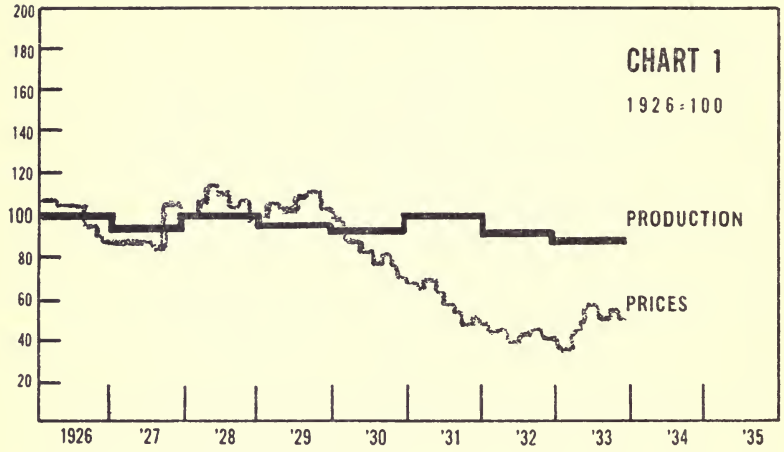


PRODUCTION FOR USE

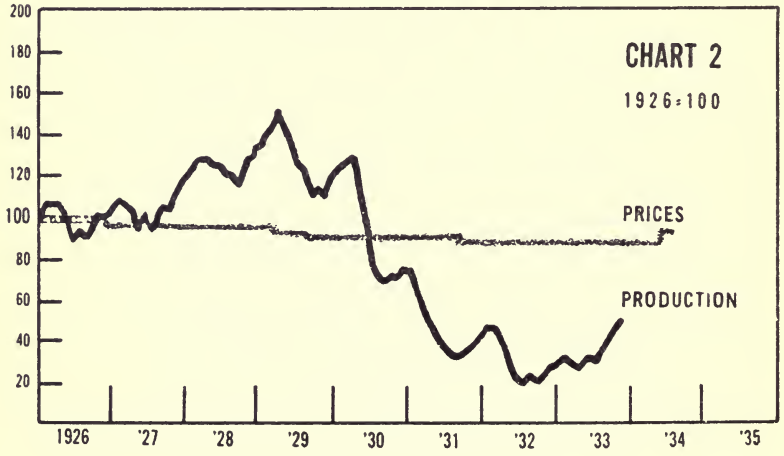
The two charts given on the following page graphically illustrate the transformation of our economic system. These charts are taken from "Industrial Prices and their Inflexibility," a pamphlet prepared by Gardner C. Means and submitted to the Senate in January 1935 by the Secretary of Agriculture. *(74th Congress, 1st Session, Document No. 13.)*

Chart One, covering only agricultural production in the United States, exhibits that phase of capitalism which we called "The Open Market System." Under this system, products are sent to market by millions of small, competing producers. Each enterpriser produces all he can of the commodity for which his land or equipment is suitable, and for which he hopes to obtain a profitable price. No control over production is practicable or practiced. As a result production tends to approach a maximum, or rather, an optimum. In other words, the system results in the production not only of the *most goods possible,* but also of such *goods as are most desired.*

PRICES & PRODUCTION for AGRICULTURE, 1926-1933



PRICES & PRODUCTION for the AGRICULTURAL IMPLEMENTS INDUSTRY 1926-1933



Under this system, as Chart One clearly shows, a drop in buying power (due to financial disaster such as occurred in 1930-33) is compensated by a drop in prices — an expedient which makes it possible to maintain full production. Such was the case in American agriculture up to 1933. Production suffered no check except for minor variations caused by weather conditions, and it was not until the government intervened and persuaded farmers to create less wealth by offering them money payments for not producing it that production dropped. Before this check occurred, production was not affected. As a result, although farmers were frequently ruined, although profits were often replaced by losses, only the producer — in this case, the farmer — was directly damaged. The consuming public suffered no loss even during the depression. Society enjoyed as much meat, bread, milk, fruit, cotton, etc. in bad times as in good.

The advantages of such a system are many. The economists and the publicists of the last century never tired of heralding the marvels of this order which combines freedom for the individual enterpriser with an optimum of wealth for the public. "Under the pressure of individual self-interest," Gardner Means writes, "the supply, the demand, and the price for each article and service, was supposed to adjust itself so that the right amount of each thing would tend to be produced at the right price." And all this automatically, without the interference of government or any other agency.

The disadvantages of this system are not so obvious. Marx was the first to assess them systematically. Although in such a system the optimum of wealth tends to be produced, its distribution is left to market forces. As a result, the worker, whose labor is treated as a commodity subject to market forces, does not get a satisfactory price for his work when the supply of labor is plentiful. But the supply of labor

must be plentiful in a time of advancing technology. Already in Marx's time, power was relieving men of much muscular work. And as the demand for labor decreased, its price tended to go down. Consequently, in an era of advancing technology, workers would not obtain under the open market system their fair share of society's increased wealth. Since in a competitive system every producer has to compete with every other to lower costs; and since in the last analysis there is only one flexible cost, the cost of labor, the logical outcome of this competition would be the division of society into two inclusive classes: owners and workers. And if the pressure were not relieved, the tension between the two classes would increase until the system collapsed under the strain.

But this system was not pushed to its logical conclusion. Instead, the open market, free price system was gradually transformed into a system of administered prices and of controlled production. In this system the lack of buying power is not translated into lower prices as before. On the contrary, prices are largely maintained. This new order is exemplified by Chart Two which, while it is illustrative of an extreme case, nevertheless clearly portrays the "administered price" phase of capitalism.

In practice, the manufacturers of agricultural implements made certain concessions to farmers in the time payments on certain specific items. These concessions, however, did not materially affect the situation.

The close relationship between administered prices and restricted production, and the wide contrast of such a scheme with free prices and sustained production becomes even more evident in the following table which is also taken from Senate Document No. 13. This table, which lists the major productive industries, shows the relation of price level and production from 1929 to the spring of 1933.

	Percent drop in prices	Percent drop in production
Agricultural implements	6	80
Motor vehicles	16	80
Cement	18	65
Iron and steel	20	83
Auto tires	33	70
Textile products	45	30
Food products	49	14
Leather	50	20
Petroleum	56	20
Agricultural commodities	63	6

As will be apparent from the above, the first five industries listed show the effect of administered prices. In these industries production has been curtailed to a much greater extent than prices have been lowered. In other words, these industries have counteracted a decreased buying power with a system of lowered output.

But with prices thus maintained while buying power is dropping, how can consumption keep up with production? It is very simple. Production is curtailed. The reduced buying power is compensated by the production of less wealth. In other words, a reduction in monetary income — a bookkeeping event — is translated into a physical event, the nonproduction of wealth. The symbolic world is thus allowed to govern the physical world.

This relationship pushed to the extreme would mean that if the national income reached zero, the production of everything produced for sale would come to a complete stop and the people would perish in the midst of idle factories and fertile fields. It seems evident therefore that in an administered price system such as we have today, the restriction of

production to that amount which can be sold becomes an artificial limitation on wealth creation similar to the iron taboo of the ancients or to the practice of the Manteweins.

The administered price system cannot be justified but it can be accounted for. To the producers and distributors of the past hundred years, control over production and prices seemed the only way out of their immediate difficulties. This is easy to understand. In the early days of the open market system it was supposed that when a commodity was produced in such quantities that it could not be sold at a profit, the resulting loss would discourage enterprisers and persuade them to turn their energies to the production of other commodities. This theory was sound so long as technology was undeveloped and nearly all goods were, of necessity, scarce. But with the introduction of power, the foundation of scarcity was undermined. By means of power-driven machinery it became possible for a few men to produce enough for many. Consequently in the middle of the last century, whole series of commodities became potentially plentiful. At this point according to the theory, enterprisers were expected to change to other pursuits. However, instead of deserting those industries in which glut was present and returning to them when scarcity was reestablished and prices rose — a difficult if not impossible procedure — our more astute enterprisers succeeded in collectivizing certain of our industries. By this means they obtained control over the rate of production and so maintained their solvency by producing only that amount of produce which they could sell.

They were assisted in this purpose by the technological requirements of power production. Though millions of competing units can efficiently and separately grow beans, the number of units which can manage a railroad system between two points, or provide power for a locality, is strictly limited.

And what is true of these extreme examples holds good, though to a lesser extent, for all power production industries. Society cannot permit its steel mills or even its rayon factories to be, in turn, promoted and neglected according to the fluctuations of supply and demand. This reason alone is sufficient to explain why our industries had to be collectivized. However, behind these concrete causes, there is a theoretical explanation why the open market system could not survive the impact of the power age.

A profitable price depends directly on supply being less than demand. But how can supply be less than the demand when the commodity, owing to modern power driven machinery, is potentially plentiful? Obviously if production for sale is to be retained, wealth creation must be artificially restricted and abundance prohibited. And this indeed is what is happening.

The faults of this system have been sufficiently emphasized, but we must also take note of certain novel considerations.

Under the open market system, one class, the wage workers, suffered conspicuously. Society prospered by and large and was able to enjoy all that technology could then provide. But under the administered price system which now prevails everybody gets cheated. A growing percentage of the workers are disemployed and kept alive on charity. The small uncollectivized enterprisers are harassed by their inability to get back even their cost of production when they sell their produce. The new rising middle class of salaried managers and technicians are embittered by insecurity and by the scarcity of jobs. Even the few powerful enterprisers who control the collectivized industries, find it increasingly difficult in the frequent crises to keep their holdings out of the hands of the receiver. This is because the public has not

the money to buy enough products to keep the factories running. The great industries therefore have to run slowly, and overhead tends to eat up all of, and sometimes more than, the profit. Property owners, those dependent on interest and rent, also are imperilled by the failure of their debtors to meet payments and by the closing of banks. At frequent intervals all of society seems to be rushing together to ruin.

This is a different story from that imagined by many of our political forecasters. The outcome is much more uncertain. In the first place the workers are not united in one common despair as their wages are driven further and further down. On the contrary, the workers tend to be divided. Those who are not disemployed are damaged less by the periodic crises than other classes of society. This is so because the great industrialists, released from the pressure of price competition, not only have not driven wages down, but are paying higher real wages today than during any previous decade. They would not be averse to paying even higher wages — since increases in cost can be translated, when production is controlled, into higher prices — if it were not for the fact that a milder form of competition still persists between the various industries. This prevents prices from being raised indefinitely. For example, if the coal miners should strike for more pay and get it, the collectivized owners could raise the price of coal and lose nothing by the transaction. But the public would then turn increasingly to petroleum and water power for energy. Consequently less coal could be sold and both the owners of coal mines and the miners of coal would lose out in the end, the first by a reduction in business, the second by increased disemployment.

On the other hand, those workers who cannot find employment are cast out of society and transformed into a pariah class which exists on sufferance — on charity, made

work, or the dole. The disemployed workers become a latent threat to the workers who are still employed, because men ready to do anything at any price naturally imperil wage scales and working conditions. For this reason the administered price system, unlike the open market system, tends to divide the working population into two more or less hostile bodies whose interests in many respects are opposed.

This was not so under the open market system which did not hamper production. Under that system only those who worked for wages were penalized by the advances of technology. And they therefore made up the only class interested in bringing about a new economic order. But under the administered price system, individuals of understanding and vision from all ranks of society may be expected to strive earnestly towards the establishment of a social order which will realize the potentialities for general welfare implicit in the recent conquest of nature by man. For today, a rational and just economic order would not require a redistribution of existing consumer wealth. Instead it would entail merely the release of production so that the wealth not created could be created, shared and enjoyed.

Though this consummation must be the goal of all who are capable of understanding the causes of our economic difficulties, still it is not at all certain that this goal will be reached. Human societies tend to cling to their institutions long after the institutions have outlived their usefulness. The question then arises: What will be the outcome if Americans continue to support an economic system which they have outgrown?

We may as well dismiss any idea of returning to the open market system. Although many politicians, farmers and other Americans in love with the past, agitate for the enforcement of anti-trust laws and a return to price competi-

tion, such a policy is impractical unless we at the same time forbid the use of modern technology and thus destroy the possibility of plenty. In the first place it would be technically impossible to operate many of our great basic industries as individual competing units; in the second place, even those industries which could be broken up into small units, could not do business profitably under conditions of potential plenty. Once upon a time a system of taxing idle land and equipment and of prohibiting combinations in restraint of trade might have created a society along the lines laid down by the classical economists; but that day is gone forever. Too many commodities can now be produced in the desired quantities. And when plenty can be attained merely by running existing factories, profit which depends on scarcity, can only be realized by deliberately not running the factories. To not-run the factories requires unified control. Such a control is impossible under the competitive conditions of the open market system. Consequently, a return to the past, rightly called retrogression, is impossible except by way of war, destruction, chaos and the dissolution of what we call civilization.

Therefore, unless America goes backward, it must go forward; and to go forward a solution must be found along the lines of administered prices and controlled production. Our problem narrows down to two alternatives. Can we revive production by an issuance of banker's money or debt credit, as has been done in the past, or must we establish a new economic order based on a new method of issuing buying power?

Recent depressions were overcome by the issuance of bank credits which partially restored national purchasing power and restarted the wheels of industry. These credits were issued to found new enterprises; for example, the rail-

road construction of the past century, the war industries of 1914-18, the automobile industry and the foreign loans of the past decade. Since the initial credits which started these periods of expansion were disbursed like all other disbursements by way of wages, profits, interest and rent, many enterprisers not directly connected with the original disbursements were revived. Shortly, they too were able to obtain credits from the bankers as their profits increased from the flow of new money. In this manner more and more enterprisers were drawn into the speculative whirlpool until what is known as "recovery" was in full swing.

Is this inflationary spiral of debt money again getting under way? Many commentators think so.

The credit base is greater than it has ever been in the past. The bankers could lend about 30 billion dollars by creating debt money against the government bonds and other securities in their vaults if undertakings promising profit could be found. But there's the rub. What enterprise is underbuilt? Where are the spaces that need to be spanned, the territories to be built up and populated, the new industries to be developed? It would seem as if something were missing from the picture. Is there any new industry in the offing which would not conflict with vested interests? Railroads opened new lands; but in so doing they destroyed only the Indian and the buffalo. Munition factories rose like mushrooms; but their rise did not curtail the output of existing enterprises; rather, the reverse. Similarly, the automobile industry, though it nourished towns into cities, damaged only the breeders of horses and the makers of carriages. What is the new great project to be?

A certain amount of capital goods production is necessary periodically in order to replace worn out machinery. And at the moment this is taking place. But these replace-

ments are not re-employing many of our idle men. And furthermore, the new machinery when in place will require fewer men to operate than did the discarded machinery, thus adding additional millions to the ranks of the unemployed. Obviously something of a vaster scope than plant renovation is required if we are to have a cyclic recovery like those of recent decades. What will it be?

The only plausible suggestion going the rounds is that we may experience a building boom. And, as the National Survey clearly indicated, America should be rehoused. But before banker's credit can be released for such an undertaking, two questions will have to be answered: One is how to reimburse the owners of the existing rundown buildings which would not be needed if new houses were built. The other is: who will have enough money to live in the new modern houses. Wage workers, farmers and many other classes today cannot afford to live in new well-equipped houses; in fact only some 8% of our people can pay rent on a modern house. Under these conditions, a building boom would necessarily have a very limited scope. It is not possible to borrow money to put up houses in which no one can afford to live; and it is therefore not likely that private credit will be forthcoming for house building.

But why cannot government credit be used to restore purchasing power? The government does not usually create money except for the coining of the precious metals, but it writes IOU's or bonds against which the bankers create money. Why not restore "prosperity" by making use of this device?

It is by this very method that the federal government recently saved the financial institutions of the country. Billions of dollars were created by the banks, borrowed by the government and then lent to railroads, industries and other banks,

while further billions were given to the unemployed. But though the unemployed are still without work, we find the very institutions which were saved clamoring against the practice, now that they need no further loans. They are in revolt against the present modest relief expenditures. These are called "unsound," which is of course accurate from the point of view of the lenders. Interest can hardly be recovered from dole recipients, not to speak of the principal. The government, it is asserted, must get out of the "relief business" and balance its budget. In return business men will scurry around and try to find projects for which money can "legitimately" be created — projects that promise dividends. But that may not be so easy. Unless a new industry comparable to the automobile industry is devised and promoted, there is nothing to issue debt money for, except war preparations. It is true, warships and munitions do not pay interest either, but human beings are so constituted that they forget such considerations when faced by what is known as a threat against their country. We may therefore expect a capitalist "revival" if our people can be scared into fearing some foreign foe. A technique for accomplishing this end has already been developed. It is known as Fascism. Italy, Germany and Japan have saved the capitalist institutional set-up by the time-honored device of the bogey man. Forces are active attempting to accomplish the same purpose in this country. Time will tell if Americans will follow this course. If they do and increase manifold their present generous appropriations for national defense, then bankers will issue additional credit money which the government will borrow and use to build warships, tanks and airplanes. Unemployment will be reduced, and a new mountain of debt will soon make our present 30 billion dollar national indebtedness look like an ant hill. Preparing for war leads to war. War em-

ploys the total manpower of the country and consumes commodities as fast as they can be made. Thus war, so long as it lasts, solves the contradictions inherent in the administered price system.

But even war would not provide the budget of the National Survey. It would save the system, at least for the time being, by speeding up industry. But the additional goods and services produced would not be food, clothing, shelter, automobiles, education, medical care and recreation for our people. They would consist of food and clothing for our armies and the armies of our allies instead of the "liberal diet" for the home population; cannon and fortifications instead of houses; trucks and tanks instead of pleasure cars; poison gas drills instead of education; field surgery instead of home care; and the inculcation of murder lust instead of the fostering of life enriching forms of recreation.

It is true that such an escape from the convention which artificially enforces poverty seems preposterous if not mad. But it can be accounted for. The reason that debt creation under capitalism can be used to wage war while it cannot be used to provide needed goods for the home population is as follows: debt money is issued on the prospect of profit or on a government guarantee. Sometimes the people are deluded into thinking that profits can be made by capturing foreign lands. Just how this is to be accomplished is not clear. But explanations are not needed in times of hysteria. At other times the people are persuaded that their country is in peril. When this occurs, even democratic governments fearlessly go into debt. On the other hand, when it is a question of supplying the people with the things they need, debt money is not available. The excuse given is that such spending does not provide either the interest on debt or its amortization —

its paying back. Consequently debt money is not issued to enable our people to command the wealth which the nation could produce. Nobody seems to notice the inconsistency between these two attitudes.

But even more fundamental is the fact that this wealth which can be but is not produced, could not in any case be distributed under any form of capitalism. Basic in the system is the treatment of labor as a commodity and of wages as a cost item. No matter how much money is created and released, each enterpriser seeks to buy his labor at the lowest price. But in order to consume the goods which could be produced but are not, everyone in the country must be given a buying power which will enable him to procure the liberal diet, the clothing budget, and all other desired goods and services which could be provided. Obviously workers will not be hired at a price giving such a buying power when they are forced by their material needs to serve at a lower price and when the system compels the enterprisers to buy labor at the lowest price.

Though a business revival is conceivable, such a revival could not remove the artificial poverty endured by the mass of our people. Such a revival could pyramid fortunes, could re-employ many, perhaps all of the idle, and could even restore full productive activity. It could not supply those simple elementary needs for the lack of which so many of our people are today suffering unnecessarily.

The case is as strong concretely as it is theoretically. Average wages were about $1,400 per year in 1929. To operate our plant at the rate necessary, to provide the budget of the National Survey, a minimum income (at 1929 price levels) of over $4,000 per family is needed. But how can this be provided so long as enterprisers buy labor at the cheapest rate, so long as technology continues to replace human effort

by extraneous energy, so long as our government and business men cooperate to prevent prices dropping?

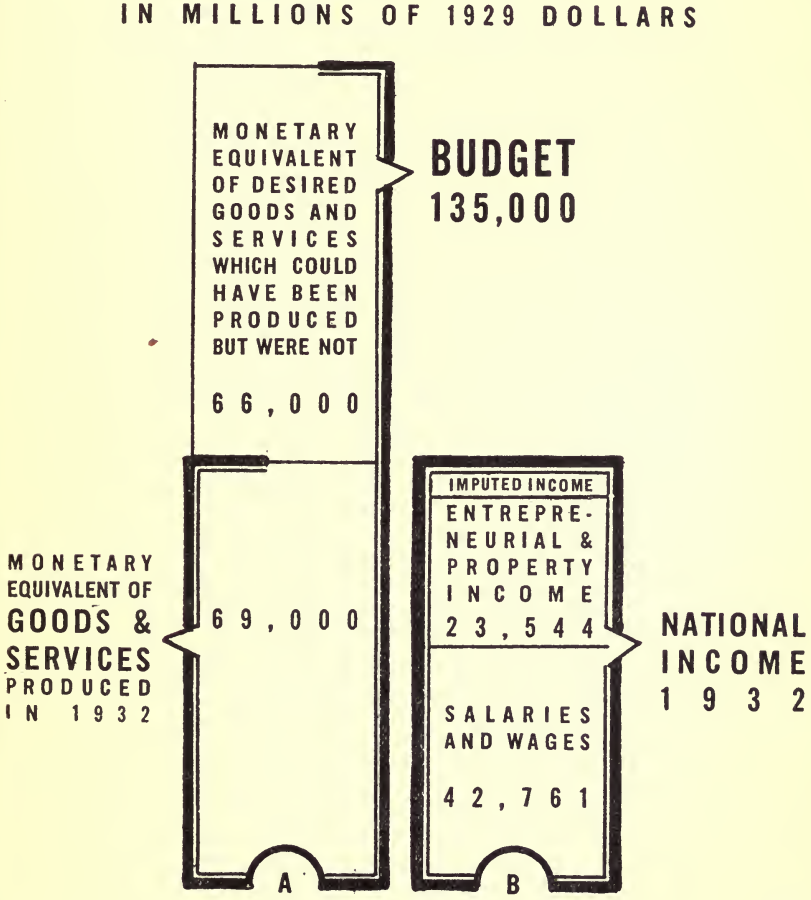
Organized labor may succeed in increasing the dollar wage. But with profits as uncertain as they are today, such increases would be translated by the enterprisers into higher prices for the consumers; and when this is done, the increase in dollar wage does not mean an increase in the real wage or buying power of the consumer-worker but may even represent a reduced buying power.

Therefore, even though our rich men may strain themselves to outdo their past efforts and to rival foreign potentates in the imaginative excesses of their spending; even though new toys may be invented requiring vast outlays for equipment; yet the resulting prosperity can only be partial since it will not enable the great majority of our citizens to live in a modern house, to wear the clothes they choose, to eat the liberal diet, and to enjoy the other satisfactions science has made potentially available.

To supply these needs, to produce and distribute the budget of the National Survey, it is necessary to abolish that barbaric relic of the past: the treatment of labor as a commodity which is bought at the lowest price. Instead of paying labor the least possible, labor must be paid that amount which will procure the family budget, a minimum income of over $4,000 per year. This minimum can be provided without taking any consumer satisfaction away from anybody. It would entail merely the release of production so that the wealth not created today could be created, shared and enjoyed. In fact, more could be issued to everybody if the factories were brought up to date, but less cannot be issued if the potentially available goods and services are to be consumed and the National Survey budget enjoyed.

Instead of following the present method of producing

Under the Administered Price system which prevails today, the quantity and kind of wealth produced (column A) is determined by the extent of the national monetary income (column B). The result is poverty artificially enforced. Under a Production for Use system, it is the needs and wants of the people (the Budget), limited by product capacity, that will govern the national monetary income. Thus, with production released, everyone will enjoy the abundant standard of living which modern technology has made potentially available.



goods and services to fit the buying power of the people, an opposite system will have to be established. A buying power will have to be issued to fit the needs of the people — a buying power limited only by the capacity of the people to produce wealth. And production will have to be regulated so that the goods and services called for by the increased buying power may be provided. We may call such a system "Production for Use," since the incentive for production will not be private profit but the satisfaction of needs and desires.

An epoch has ended. Society is at the threshold of a new era. Either the technological advances of the past 100 years must be erased by continuous war and demoralization, or our institutions must be altered until they are compatible with our technology.

Mankind seems to sense the seriousness of the times. In many scattered places, people are putting aside their normal preoccupations and are devoting themselves to ideals which lie beyond their immediate interests. This mood recurs periodically throughout history. It can effect an advance to a new and finer society or it can be used to destroy the values of the day. It is being used for both purposes in our times.

America too must choose. Two roads lie before her. Our people can rally behind meretricious slogans so that with moral fervor and deep emotion they compel the preservation of the obsolete institutions which enforce reaction and decay. Or they can accept the mandate of their early history, declare once more their independence and create a new world in which the great phrases of their forefathers may become the living reality of the days to come.

A discussion of a Production for Use economy will be the theme of Mr. Loeb's forthcoming book "Production Released".

A more detailed account of the findings of the National Survey will be found in "The Chart of Plenty" and in the "Official Report of the N.S.P.P.C." Both of these volumes ($2.50 each, postpaid) can be procured by writing to the Continental Committee, 170 Fifth Avenue, New York City.

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